Early foreign investment into West Germany after the Second World War

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I dedicate this dissertation to my father.

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General introduction

It is safe to say that in the historiography of the "golden age of economic growth in Western Europe" (Crafts 1995), international capital flows and foreign investment are the poor relation of international trade. Emblematically for this state of affairs, Christoph Buchheim (1990) devotes only a few pages to the liberalisation of cross-border capital flows in his comprehensive study of "the reintegration of West Germany into the World economy, 1945-1958". This imbalance is not a coincidence. Instead, it mirrors the differential development of international trade as opposed to international capital flows during the early post-war period. European reconstruction was accompanied by a rapid expansion of cross-border trade. Contemporaries were especially stunned with the export performance of the new Federal Republic of Germany. In January 1954, the Financial Times of London reflected on the "commonly held view" that apparently "nothing could arrest the long series of German successes". Among the country's greatest successes was "the meteoric rise in German exports since 1950[1]". Historians of the period have accordingly characterised the German post-war 'miracle' as a prime example of export-led growth (Giersch et. al 1992, 71). Even though this verdict is not shared universally (Crafts & Toniolo 1996, 12), it has been confirmed recently by Vonyó (2018, 171), at least for the period until the mid-1950s.

In contrast, the growth of international capital flows was much lower during the 1940s and most of the 1950s, especially as far as continental Europe is concerned[2]. Large private, cross-border capital movements, notably from the United States towards the European market, only picked up during the late 1950s and the early 1960s. The resulting time lag of approximately one decade between international trade and investment is not a coincidence either. Post-war reconstruction was deliberately shielded through pervasive exchange controls from disturbances by movements of international capital (Obstfeld & Taylor 1997, 27). Organized international capital markets re-emerged only during the second half of the 1950s for the first time after the War with the growth of offshore Eurodollar markets (Schenk 1998). Previously, foreign investment had typically been limited to reinvesting asset returns in the countries in which they had arisen (Wilkins 1974, 308). As a consequence, there are very few contributions to the literature that are devoted to foreign investment or international capital flows specifically during the first post-war decade. Notable exceptions embrace a business history perspective.

[1] The Financial Times of Saturday, January 16, 1954, p. 4: "How well has Germany done?".

[2] Great Britain serves as an outlier in this respect, experiencing large inflows of Foreign Direct Investment by corporations from the United States already during the late 1940s and early 1950 (Schenk 1996).

For the example of West Germany, Wubs (2012) studies the fate of Dutch multinationals on the German market, and Eck (2003) performs a similar exercise for French companies. The extensive literature on the European Recovery Program also relates to capital flows in as much as American taxpayer funds disbursed across Western Europe during the late 1940s and early 1950s represent publicly mandated transfers of investment capital (Eichengreen & Uzan 1992). However, to my knowledge, there are as yet no systematic studies of how private foreign investment resumed in one particular country during an early period after the end of the Second World War.

The papers assembled in this dissertation attempt to fill this gap in the literature for the important case of West Germany. It is important, on the one hand, because it had been a frequent destination of foreign investment since the 19th century, notably in manufacturing (Blaich 1984). On the other hand, West Germany during the early post-war period represented an investment destination with a unique recent history. It had been isolated from international capital markets for almost two decades after the financial crisis of 1931. It had notoriously defaulted on its foreign indebtedness during the 1930s. And it had caused an entire World War under an extremely aggressive, dictatorial regime. How did inward foreign investment recover from such upheavals? Who were the first movers who chose to commit new capital to that country, earlier than anybody else? How important were past misdeeds, such as external default, for investment decisions after the War?

To paraphrase the Financial Times, one crucial empirical impediment to answering these questions is "the long series of German successes" over the course of the 1950s. By the end of the decade, the Federal Republic had become a 'miracle' country boasting extraordinary economic prosperity and political, as well as monetary stability, even in comparison to its similarly prosperous Western European neighbours (Carlin 1996, 457). To all intents and purposes, it had become a regular host country for foreign investment, as indeed manifest in the steady increase of inward foreign direct investment (FDI) during the following decade (see Table 6 below). Thus, when FDI finally picked up at an elevated pace, the potential relevance of past crises for that FDI had likely been obscured by the successful recovery in the meantime. As a consequence, those questions need to be answered through a careful analysis of the earliest instances of foreign investment after the War, occurring during the first half of the 1950s. This extensive margin of FDI unfolded within an environment of contemporary exchange controls that largely referred potential investors to a peculiar form of investment finance in the form of blocked non-resident accounts with German banks, so-called *Sperrmark*. By way of introduction, therefore, Chapter One traces the history of *Sperrmark* and the concomitant regulation of investment projects.

Due to their transferability among non-residents since early 1951, *Sperrmark* became an international medium of exchange that allowed arbitrage operations between national securities markets. They established indirect *Deutschmark* convertibility for non-residents several years before direct convertibility at the official exchange rate would be introduced. Moreover, the regulatory environment for foreign investment was effectively liberal due to a peculiar political compromise among Allied occupying powers. This opened up a broad range of serious investment opportunities relatively early after the end of the War. At the same time, it gave rise to many illegal conversion opportunities. In this way, the historical episode shows that foreign investment was possible even in the absence of full convertibility, while the effectiveness of convertibility restrictions that were in place after the Second World War was questionable. The difference to subsequent full convertibility was thus one of degree, rather than kind.

On this basis, Chapter Two proceeds to analysing the extensive margin itself, in the form of the universe of direct investment projects during approximately the first five years following the lifting of the Allied investment embargo in June 1950. It turns out that foreign investors who had already been active in Germany during the interwar era played an important role in resuming FDI into West Germany after the Second World War. They tended to invest earlier and more frequently than other groups of investors after the War. Moreover, their historically established presence plays a significant role in the investment decision of new, post-war entrants. The latter tended to locate in districts with high concentration of companies historically under foreign ownership. This effect is present even after controlling for a range of other factors, notably also country-specific agglomeration. The Chapter thus reveals the strong persistence of investment patterns across a quarter century of War and economic crisis. It also contributes to a recent literature on the importance of ethnic ties in FDI decisions (Burchardi et al. 2018). In early post-war Germany, the reason why foreigners identifiable as being of German origin invested significantly earlier than other groups was because they already had liquid capital inside the country at their disposal. Their effect vanishes once the sample is restricted to the investment of new foreign capital.

Following these general findings, the final chapter explores one specific issue in the context of post-war foreign investment. The settlement of Germany's default through the London Debt Agreement of 1953 has been credited invariably with restoring the country's creditworthiness on international capital markets, and has therefore received a considerable degree of attention in public debate on present-day debt crises. However, empirical evidence supporting the beneficial effect of the Agreement is scarce and prone to problems of post hoc ergo propter hoc.

To overcome these problems, Chapter Three offers two perspectives on the contemporaneous rather than the lagged impact of the Agreement. On the one hand, the market for *Sperrmark*, representing the means of investing in Germany at the time of the Agreement, provides an instantaneous measure for the Agreement's impact on German creditworthiness. Testing for structural breaks in the *Sperrmark* price series reveals that the Agreement certainly did have an impact, but through its role in restoring direct convertibility of asset returns rather than through the debt settlement itself. On the other hand, the data introduced in Chapter Two makes it possible to estimate the effect which outstanding pre-war debt had on post-war investment in the first place. Results based on two different debt measures for contemporary German districts show that outstanding debt did not represent a solvency risk for German debtors. Debt settlement in the London Agreement did not have a differential impact on investment on the local level according to whether the particular district owed any outstanding debt.

The empirical results derived in this dissertation rest on an extensive archival data set that was collected from textual records held at the German Federal Archives. They are complemented by two more archival data sets, collected from records held at the Archives of the German *Bundesbank* and the United States National Archives respectively. All these records have, to my knowledge, never been digitized before. These particular circumstances create a number of complications for data processing and interpretation. On the one hand, post-war data collected from the German Federal Archives essentially represent a register of foreign willingness to invest during a particular period of time, and therefore suffer from right truncation. As a consequence, simple statistical inference based on individual investors as units of observation risks lacking external validity, a problem discussed at length in Chapter Two. On the other hand, the process of digitisation required making a range of judgement calls that are necessarily open to criticism. The consistency of the final data set, for example, necessitates excluding a variety of investment projects on a discretionary basis. Such decisions are frequently based on third sources outside of the original records. However, for each instance concerned, I justify my decision in detail in the extensive appendix. In general, it is important to note that key measures like the indicator variables for German emigrants or pre-war investors represent lower bounds: They indicate those investors for whom I was able to verify their national origins or their pre-war investment activity in Germany. Nevertheless, studied with due care the data allow for answering relevant research questions which the existing literature has not been able to answer. Combined with a detailed account of the historical circumstances and supporting statistical evidence, they contribute to our understanding of a previously neglected dimension of the early post-war international economy.

CHAPTER I: *Sperrmark* and currency convertibility during the early 1950s

The economic history of exchange controls has been written largely from a macroeconomic perspective, exemplified by the growing body of research on the functioning of the Bretton Woods system after the Second World War. This paper complements the existing literature by providing a micro study of exchange controls in the Federal Republic of Germany during the first half of the 1950s. The legal trade outside of Germany in inconvertible non-resident accounts with German banks, commonly known as *Sperrmark*, from early 1951 onwards opened up foreign investment opportunities in German assets at a time when the German capital account remained virtually closed. It established indirect non-resident convertibility of *Deutschmark* and thus provided an effective early means for arbitrage between otherwise still segmented markets. Moreover, relatively liberal regulations prevented stringent policing of exchange controls on the level of private companies. Resulting conversion opportunities show that effective enforcement of convertibility restrictions was incompatible with a policy of encouraging foreign investment. Overall, the German example reveals that the difference between Bretton-Woods convertibility after 1958 and the prior period of inconvertible currencies was one of degree, not of kind.

Introduction

"One of the strangest features of the international monetary scene during the past few months has been the emergence of the blocked German mark as a kind of international medium of exchange"[3]. In October 1951, the Financial Times was astonished that German currency should have developed into an "international medium of exchange", in particular inconvertible, non-resident *Deutschmark* accounts held with German private banks[4]. Blocked German mark, commonly known as *Sperrmark*, had been an essential feature of German exchange controls since the early 1930s.

[3] The Financial Times of Thursday, October 25, 1951, p. 4: "D-Marks as International Currency".

[4] In this paper, the terms "non-resident" and "foreign" refer to any individual or entity legally residing outside the Federal Republic of Germany. Thus, a German national living in France would be a foreigner, while a French national living in West Germany would be German. This categorization reflects German exchange control legislation, which had been primarily designed as an instrument to prevent capital flight, rather than to control assets in Germany owned by nationals of other countries. Equally, I will use the terms "Germany" and "West Germany" interchangeably. Eastern Germany, represented by the German Democratic Republic (GDR), is irrelevant for the purpose of this paper, as GDR residents had been barred from financial transactions with Western Europe since the end of the War. Nor does (Western) Germany include the Saar area on the border with France and Luxembourg. This territory had been integrated with France at the end of the War and only acceded to the Federal Republic in January 1957, i.e. after the period under consideration in this paper.

In fact, blocked non-resident balances of some form were a common feature of exchange control systems all across Europe at the time (Obstfeld & Taylor 1998, 374). However, they have so far received relatively little attention themselves in the literature. Most historical research that deals with capital and exchange controls has been focused on the institutions of international economic cooperation, or on macroeconomic aspects of international capital flows. The "inconsistent trinity" (Obstfeld & Taylor 2004, 30) of free cross-border capital flows, fixed exchange rates and independent monetary policy has been studied extensively, as has the link between capital controls and economic growth (Eichengreen & Leblang 2003, 4ff.), or the macroeconomic impact of capital account liberalization across countries (Eichengreen 2001). Specifically for the post-war period, contributions range from comprehensive surveys of the Bretton-Woods system (Bordo & Eichengreen 1993) and large histories of international monetary cooperation (James 1996) to more detailed accounts of the origins of "Bretton-Woods" (James 2012), as well as country studies (Monnet 2017, Bordo 2014). Equally, the history of the European Payments Union, a multilateral, current-account clearing system directly dependent on the existence of exchange controls in member states, has been written either from an institutional perspective (Kaplan & Schleiminger 1989) or has been embedded into a wider narrative about the post-war reconstruction of Western Europe (Eichengreen 1993). The effects of exchange controls, of their reform or altogether of their removal constitute a central part of these studies. Yet the precise functioning of these controls themselves are hardly ever discussed in any detail, but rather taken for granted. There are a number of notable exceptions with respect to the United Kingdom: Catherine Schenk has written extensively on the international history of Pound Sterling during the 1950s (Schenk 1994a), covering British exchange restrictions, as well as the different types of inconvertible Sterling similar to German *Sperrmark* (Schenk 2010, 101). When studying official interventions in the Pound Sterling exchange markets at the time, Schenk (1994b), Klug and Smith (1999) and recently Naef (2017) devote considerable attention to the regulatory regime under which these markets worked in the first place. One key finding emerges from the British experience: Interventions met with limited success, not the least because there were many opportunities to evade existing capital controls (Klug & Smith 1999, 185).

Their ineffectiveness in the face of rampant evasion had been a central criticism already during the 1930s. The well-known British journalist Paul Einzig observed that "exchange restrictions tend to become a penalty on loyalty and a premium on disloyalty", the more distortive they would be (Einzig 1977, 111). In characteristically stark terms, he called them "utterly inefficient and impossible to enforce" (ibid., 107).

At about the same time, however, he conceded that they were in fact "practically watertight" in National Socialist Germany (Einzig 1935, 184), because they were applied with "draconian rigour" (Einzig 1977, 120). In the same vein, Obstfeld and Taylor (2004, 135) claim that controls had become fairly effective by the time Einzig raised his criticism during the mid-1930s.

For the case of Germany, renunciation to apply such draconian rigour represented the key difference between the 1930s and the early 1950s, despite a high degree of legal contitinuity. *Sperrmark* accounts remained officially inconvertible from 1931 to 1954, as did asset returns on foreign property located in Germany. Foreign exchange proceeds had to be surrendered to the Central Bank, and price controls on foreign trade were maintained in order to ensure the steady growth of currency reserves. At the same time, however, the political dynamic had changed from the National Socialist autarky drive of the 1930s towards the integration of Germany into the post-war Western world economy. Moreover, with Allied occupation, the governments of Germany's interwar creditor countries directly took over administration of the debtor country. The particular compromise reached between differing interests among Allied powers resulted in fairly liberal regulation of non-resident investment after the lifting of the investment embargo in June 1950. Importantly, the early introduction of *Sperrmark* tradability in March 1951 meant that *Deutschmark* became indirectly convertible in outward direction for non-residents. Stock market arbitrage between Germany and important financial centres abroad picked up in due course. In addition, private German companies, encouraged to increase their international activities, were soon authorized to resume certain financial transactions with their foreign counterparts, such as the payment of royalties or management fees, which in turn were hard to police. Finally, the discount on *Sperrmark* prevalent on foreign markets until early 1954 encouraged evasion of existing exchange controls by providing strong incentives towards illegal conversion of nominally frozen assets. All in all, taking a micro view on the implementation of exchange controls at the time shows that they were in reality rather patchy. This is not to say that exchange controls did not matter. As will be seen in Chapter Three, for example, the restoration of official convertibility of investment returns at the official *Deutschmark* parity was an important precondition for restoring investor confidence into the German economy. However, the present paper emphasizes the gradual nature of the "return to convertibility of the European currencies" (Carli 1988), which in the case of Germany began in earnest by 1950. While this has been established already by previous research for trade payments under the European Payments Union, it holds equally true for capital transactions such as the ones carried out using *Sperrmark*. The remainder of the paper is organized into three broad sections, respectively tracing the different dimensions of this gradual process towards convertibility. The first section introduces the financial history of *Sperrmark*.

The second section turns to the regulation of foreign investment into German private companies and resulting contradictions between liberal regulation and effective enforcement of exchange controls. The final section then provides evidence for the smooth functioning of investment and stock market arbitrage through *Sperrmark* transactions, in particular for the example of stocks of *Allgemeine Elektricitäts-Gesellschaft (AEG).*

A short history of *Sperrmark*

Blocked non-resident accounts were a central feature of German capital controls for more than a quarter century, between July 1931 and June 1958. On July 13, 1931, the failure of the Danatbank triggered a run on the German banking system. The *Reich* government reacted by declaring two bank holidays and took advantage of the respite to enact a host of emergency measures, suspending convertibility of the *Reichsmark* and thus taking Germany off the interwar gold-exchange standard (Schnabel 2004, 853). In order to stop rampant capital flight, all foreign exchange transactions were centralized with the *Reichsbank* and commissioned private banks, respectively. Payments abroad became subject to government approval (Banken 2006, 125). Accordingly, bank accounts owned by non-residents remained blocked when banks gradually reopened during the following two weeks. Current payments to foreigners, such as debt interest and dividends, however, remained fully convertible in practice, even though capital controls became ever more pervasive. Moreover, the original intention of controls was clearly to prevent capital flight, and not to manipulate foreign trade flows (Banken 2006, 144). The situation changed with the advent of the National Socialist regime. In June 1933 Germany defaulted on all its foreign obligations, with only a few temporary exceptions. From then on, German private individuals or companies had to make any payments due to non-residents to the newly founded *Konversionskasse für deutsche Auslandsschulden*, thus opening a blocked account on the foreigner's behalf (Lückefahr 1958, 37). Under German law, the German payer was discharged from her debt through this *Reichsmark* payment, irrespective of the contractual currency. Subsequent conversion into the payee's currency was subject to bilateral negotiations among national governments. Concessions with respect to German exports typically resulted in higher conversion quota (Frech 2001, 68), yet as a rule, these quotas steadily shrank as the regime's balance of payments and thus its currency reserves continued to deteriorate over the course of the 1930s (Boelcke 1994, 35). The Second World War naturally ended all transactions with belligerent nations, while investors from neutral countries could convert some of their German earnings as late as 1945 (Frech 2001, 244). As a result of growing restrictions the quantity of blocked funds and the complexity of the system grew.

Ten broad categories of *Sperrmark* existed at the outbreak of the War (Dernburg 1955, 20), not including certain trade-related types, which played an important role in German clearing agreements with South-Eastern Europe for a few years after 1934 (Neal 1979). The purposes for which non-resident users were authorized to spend their blocked funds inside Germany varied among the different *Sperrmark* categories. They generally included personal travel expenses and payment of taxes, as well as long-term investment in stocks and bonds. Some types could also be used for direct investment into German companies, and even for the purchase and export of German goods (Lückefahr 1958, 63ff). As most types were transferable among non-residents, they simultaneously traded in foreign financial centres at varying discounts, according to the varying breadth of disbursement opportunities (Dernburg 1955, 20). This plethora of German "funny money" (Neal 1979, 393) was heavily criticised in creditor countries, contributing to the "immense amount of ill-feeling abroad" (Einzig 1934, 42). Repaying parts of the country's foreign-currency obligations in blocked *Reichsmark* represented a method of default that was considered dishonest (Einzig 1977, 126) and which was particularly disadvantageous for foreign creditors (Obstfeld & Taylor 1998, 374). For a while German authorities repurchased these blocked funds for export promotion purposes at prevailing discounts, with foreign exchange that could otherwise have served to honour contractual debt obligations (Ebi 2004, 40ff.). Importantly, the exchange controls system was also employed as an expropriation tool against emigrant Jews and other refugees (Banken 2006, 188). Emigrants were authorized to convert only a tiny fraction of their German capital into foreign exchange, paying the rest into special blocked accounts (Köhler 2005, 436).

At the end of the War, Allied authorities retained the essence of existing controls. The different types of *Sperrmark* were unified and remained blocked for the time being. Retaining existing rules also implied that there was still no legal convertibility. Controls were actually tightened in some respects: Foreign assets were summarily sequestered and a moratorium on new foreign investment was declared (Buchheim 1990, 161). Non-residents could not be party to any financial transactions within Germany before July 1948, which barred them from disposing of their *Sperrmark* among other things (Kühne 1984, 8). Sequestration was lifted only gradually between July 1948 and August 1950, when new regulations allowed *Sperrmark* owners to invest their funds into virtually all kinds of German assets. Any investment returns or sale proceeds once again became blocked[5].

[5] Lückefahr (1948, 144). Since May 1949 non-resident owners could already sell their assets. They could also raise loans within Germany in order to cover operating costs or restore their assets to their pre-war state. This was strictly regulated, however, and the proceeds from selling assets became *Sperrmark* (Kühne 1984, 87). Other limited investments and types of expenditures could already be made in 1949, too: *Sperrmark* could be used for own travelling expenses inside Germany, the taxes payments and private support payments. These disbursements were subject to official approval and tight monthly limits, cf. Kühne (1984, 130ff).

A crucial regulatory change occurred on March 3, 1951, when *Sperrmark* became legally negotiable among non-residents. The reform allowed for the emergence of official currency markets for so-called 'acquired' *Sperrmark* outside the Federal Republic, as opposed to 'original' *Sperrmark* of historic investors (Dernburg 1955, 23). From now on, a prospective investor who had never before owned any assets in Germany was able to newly commit her foreign capital to the German economy, for the first time since the end of the War. On the level of Germany's balance of payments, she would buy an existing claim against the country from another non-resident, not giving rise to any additional capital inflow. On the individual level, however, she would have exchanged capital in her home country against capital in Germany. Subsequently disbursing the acquired *Sperrmark* balance for a German asset of her choice would create genuinely additional foreign investment on the individual, if not on the macro level. Analogously, the new rules provided legal, indirect conversion opportunities for non-residents at the *Sperrmark* exchange rate. The first step towards direct convertibility at the official *Deutschmark* parity was taken on September 30, 1953, when current returns on pre-1931 investments were made convertible with respect to countries that had signed the London Debt Agreement on February 27. Further relaxations occurred on December 19, 1953, and finally on February 1, 1954, when current returns on all non-resident assets were made directly convertible with respect to all countries. *Sperrmark* balances themselves followed soon. The introduction of so-called limited convertible non-resident DM accounts (*Beko-Mark*) in April 1954 established their direct convertibility for the benefit of residents of soft-currency countries, that is, fellow member states of the European Payments Union and Latin American countries. Beyond their role in facilitating convertibility *Beko-Mark* notably represented the first variety of German blocked accounts after the War that could also be used for financing German exports, just as it had been the case for *Sperrmark* during the 1930s (Dernburg 1955, 28). The resulting discrimination against residents of hard-currency countries was abolished with the substitution of *Sperrmark* by liberalized capital accounts (*Libka-Mark*) in September 1954 (Dickhaus 1996, 191). For the purpose of foreign investment, *Sperrmark* and *Libka-Mark* can be treated identically. The former was the means of investing in Germany between July 1950 and September 1954. The latter inherited this role until complete liberalization of the capital account in July 1958[6].

Regarding the sources of these means of investing, additional *Sperrmark* could arise in four main ways during the first half of the 1950s: Foreign investment returns and sale proceeds of non-resident assets together constituted the largest part, amounting to about 70% during 1952 and 1953.

[6] The preceding chronology can be verified in Kühne (1984), p. 50, 86, 311, 407, 410 and 641.

An approximately further 15% came from settlement in *Deutschmark* of pre-war foreign debt denominated in foreign currency. Such settlement had been authorized since June 1950, if all foreign creditors of the German debtor consented (Rombeck-Jaschinski 2005, 94). The remainder consisted of restitution payments to non-resident victims of the National Socialist regime[7]. At first Allied, and later German legislation provided for the physical restitution of looted property to persecuted individual or their heirs (Goschler 2005). In case this was no longer feasible or an out-of-court settlement was reached, current owners had to make compensation payments accordingly (Schwarz 1974, 175). Such payments were made to *Sperrmark* accounts as survivors had typically become non-residents by the early 1950s and no exception was made for them from the point of view of capital controls (Schwarz 1974, 373).

Table 1: Largest categories of *Sperrmark* owners, as of 31st December 1953.

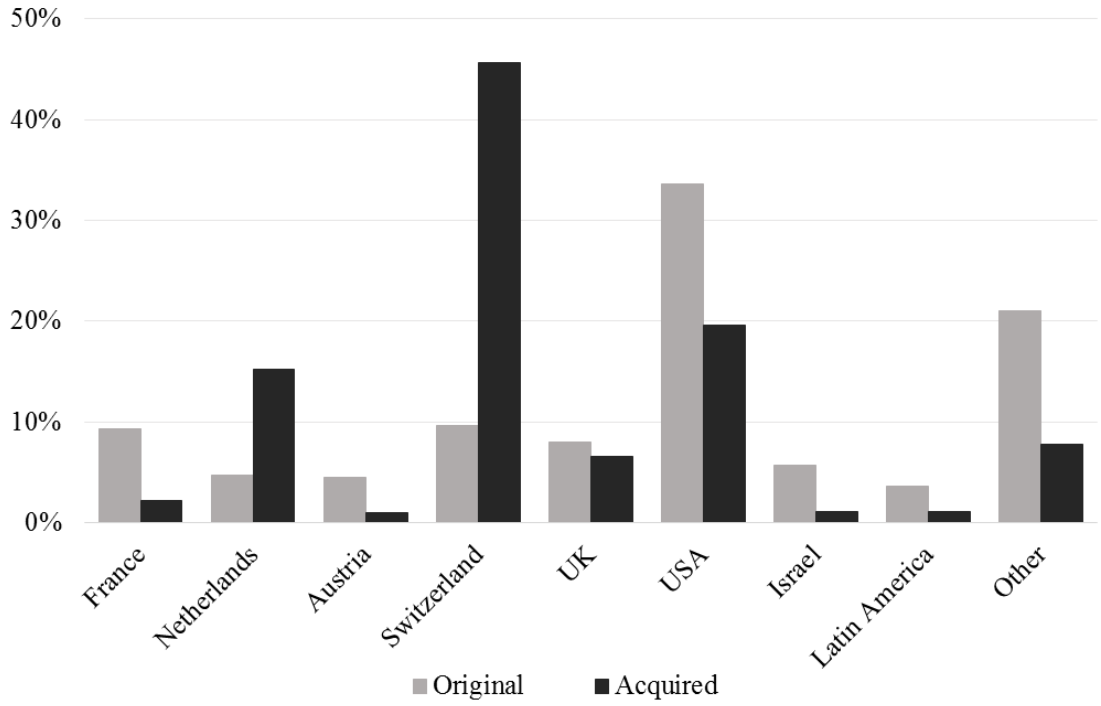
Original *Sperrmark*	percent of total	Acquired *Sperrmark*	percent of total
US individuals	24,6%	Swiss banks	25,9%
US companies	5,9%	Dutch companies	13,4%
UK individuals	5,9%	Swiss companies	11,6%
Swiss individuals	5,1%	Swiss individuals	7,8%
French banks	4,3%	US individuals	6,9%
Israeli individuals	4,3%	US companies	5,3%
All six	50,0%	All six	70,9%

Source: HABB B330/76/2, Anlage zum Protokoll der 166. Sitzung des Zentralbankrats vom 31. März 1954

The distribution of *Sperrmark* owners shown in Table 1 reflected the aforementioned sources, and the scattered distribution of original *Sperrmark* more generally. By the end of 1953, private individuals living in the U.S. constituted by far the largest category of historic owners, reflecting the role of the United States as both a prominent destination of German emigration and the most important home country of private investors during the interwar period (Ritschl 2002). Concerning acquired *Sperrmark*, Switzerland was clearly at the centre of the international market. By the end of 1953, Swiss banks held more than a quarter of all acquired *Sperrmark*, while Table 2 shows that the overall Swiss share amounted to a full 46%.

[7] The *Bank deutscher Länder* collected data on the composition of *Sperrmark* accounts during the period. The resulting statistics were annexed periodically to the protocols of the Central Bank Council, which can be accessed in the *Bundesbank* Archives under HABB B330. Unfortunately, the data is patchy as reporting methods changed repeatedly and a certain fraction of appendices has not survived.

Table 2: *Sperrmark* ownership across countries**,** as of 31st December 1953.



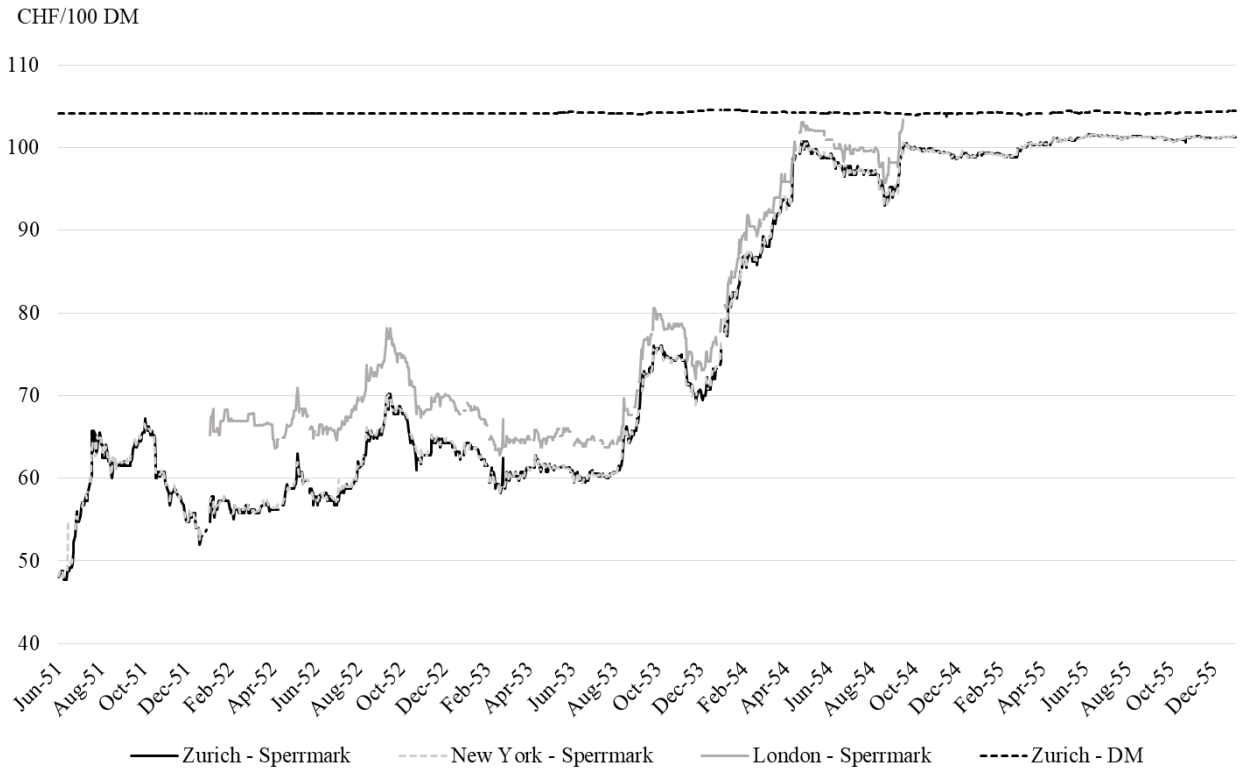
Source: HABB B330/76/2, Anlage zum Protokoll der 166. Sitzung des Zentralbankrats vom 31. März 1954

These figures correspond with Dernburg's (1955, 25) verdict that Zurich was the most active market and as a whole a net buyer of *Sperrmark*, while New York was a net seller. Typically, *Sperrmark* was sold by original owners in the US or other countries to their local bank, which would in turn sell to large Swiss banks acting as market makers. Investors interested in purchasing assets in Germany would subsequently approach these banks for the necessary amounts of *Sperrmark*[8]. Dernburg (1955, 25) also identifies Zurich, New York and London as the three most important marketplaces, for which daily *Sperrmark* prices are given in Table 3. Regular daily price quotations for New York and Zurich first appeared in June 1951, three months after the legalisation of markets. Quotations for London start in January 1952 and end with the *Sperrmark* reform of September 1954. New York prices track Zurich prices very closely, if converted into Swiss *Francs*. This in itself is evidence to a highly integrated market between the only two financial centres with fully convertible national currencies during the early 1950s[9]. In this sense, the slightly higher price in London represented a convertibility premium on a national market with strict exchange controls.

[8] The records of the German investment commission contains ample evidence for this process. For one example, see BArch B102.6774, 81. Sitzung (23.10.1953) Liste W., Nr. 40, Devisenprüfungsbericht der Oberfinanzdirektion Koblenz, vom 11.9.1954, p. 22.

[9] For conversion into Swiss *Francs*, I take the average of daily bid and ask prices (i.e. the mid-price) for the US-$ in Zurich, as reported by the Neue Zürcher Zeitung, Technically, the Swiss *Franc* was not fully convertible with fellow currencies in the European Payments Union, depending on whether a given transaction was *clearingpflichtig*, i.e. had to be channelled via the EPU clearing system.

Table 3: Daily *Sperrmark* prices in Zurich, New York and London (all prices converted into CHF).



Source: Daily issues of Neue Zürcher Zeitung (Zurich), Financial Times (London), New York Herald Tribune and New York Times (New York)

Exchange controls and the regulation of foreign investment

The technical history of *Sperrmark* introduced on the preceding pages is embedded into the broader historical context of Germany's foreign financial relations during the early post-war period. These relations were shaped by an awkward compromise between two diverging policy objectives, namely a desire to liberalize the German economy and attract foreign investment on the one hand, and the perceived need for maintaining exchange controls on the other hand. As far as exchange controls are concerned, one episode neatly sums up their inherent dilemma: In June 1952, the German economics minister Ludwig Erhard met with the Central Bank Council of the *Bank deutscher Länder* to discuss fundamental problems of exchange controls. Erhard made a passionate plea in favour of liberalisation. He argued for full *Deutschmark* convertibility as early as possible and wanted to retain controls only for capital account transactions. Wilhelm Vocke, the President of the Bank, replied drily that "in this case, they have to stay for everything"[10].

[10] HABB B330.57.1, Prot. der 122. Sitzung des Zentralbankrats am 11.6.1952, Aussprache über die Probleme der Devisenbewirtschaftung, p. 9, Präs. Dr. Vocke: „Sie haben erklärt, Sie wollen zwar die Devisenzwangswirtschaft abschaffen, sind sich aber gleichzeitig der Notwendigkeit bewusst, dass sie für den Kapitalverkehr bleiben muss. Dann muss sie aber auch in toto bleiben".

As Vocke realized, the effectiveness of controls required them to be pervasive, which quickly brought them into conflict with other policy aims. Private foreign investment during the early 1950s offers a case in point for this problem.

One striking feature of the historical context is that with the Allied occupation of Germany, governments of interwar creditor countries actually acquired military control over the defaulting debtor country for the time being. Such a situation could be interpreted as an extreme case of "supersanctions", which had been occasionally applied against defaulting debtor countries before the First World War (Mitchener & Weidenmier 2010). If the analogy was accurate, the occupying powers would have ensured the swift and orderly resumption of payment on all external liabilities. The reality, however, was far more complex. The political dynamic of the nascent Cold War gravitated towards integrating West Germany into the Western Alliance, making it ever more unlikely that the country would be squeezed by external creditors[11]. Moreover, beyond these broader political considerations the occupation was costly to Allied governments on a purely financial level. Newly created state and Federal governments within Germany could be charged with internal occupation costs, but all external expenses had to be borne by Allied governments as long as German exports had not recovered sufficiently. For precisely this reason, the US insisted on a "first-charge principle" on German export revenue, which was to be spent on vital imports before any other claims, including returns on foreign-owned assets in Germany, could be satisfied (Buchheim 1990, 7). During 1947, in the context of an early proposal by American creditor banks for effectively unblocking their outstanding claims against German debtors, US Military Government rebuked the idea by pointing out that "such payment would in fact come from the American taxpayer who feeds Germany while the private creditor collects"[12]. The same rationale was one of the reasons why Allied governments imposed the embargo on new foreign investment into Germany in the first place. The returns on such investment would have constituted an additional liability on the country's future foreign exchange revenue, already compromised by the eventual repayment of outstanding foreign debt and Allied assistance (Beckers 2014, 81)[13].

[11] This argument was already advanced in the contemporary press. On October 6, 1952, the Frankfurter Allgemeine Zeitung published a piece on the rising creditworthiness of Germany among Swiss banks and financiers, writing about the mood of the latter (p. 7): "The danger of another German default can be discharged for the time being, because the Americans could not possibly allow West Germany to slide into default as a focal point of East-Western tensions".

[12] IfZArch, OMGUS records, Shipment 2, Box 135-1, folder 7, Clear Text of Cable from OMGUS signed Keating to AGWAR, January 7, 1947.

[13] Two other reasons were: Firstly, early new foreign investment could have compromised other aspects of Allied policy such as dismantlement of German industry, possible socialisation of basic industries, and the chances of achieving a four-power agreement eventually (Buchheim 1990, 161). Secondly, the devaluated *Reichsmark* was retained as Germany's currency for the time being. As a result, occupation authorities considered it undesirable that foreign investors would buy out large swaths of German industry at extremely favourable exchange rates if the embargo had been lifted before the currency reform (Becker 2014, 80).

At the outset, the American side had in fact intended the embargo in general, and the freezing of non-resident balances in particular to continue until a comprehensive debt settlement had been reached, in order to safeguard the interests of existing creditors. The European Allies, however, were opposed to this idea. For a time immediately after the end of the War, France had taken a number of initiatives to bring large companies in the French occupation zone under the control of French capital, even though such attempts were not successful in most cases (Eck 2003, 32). The British government on its part was under the intense pressure of its own standstill creditors to unfreeze blocked accounts, if not for direct convertibility than at least for use inside of Germany (Rombeck-Jaschinski 2005, 67). Over the course of the 1930s, British banks had become by far the most important holders of this particular type of German commercial credit which had been rolled over since the first standstill agreement of 1931 (Forbes 2000, 176). By settling with their German debtors in *Deutschmark* and selling the resulting *Sperrmark*, they would have been able to divest themselves of their frozen assets at an early point after the War[14]. As a consequence, the British side, assisted by demands made by Benelux governments, became the earliest and most determined proponents of opening up investment opportunities for *Sperrmark* reinvestment on the one hand, and for allowing indirect convertibility through *Sperrmark* tradability on the other hand (Buchheim 1990, 162). American officials were highly sceptical, pointing out that even limited reinvestment opportunities would already result in some degree of convertibility: "Even if relatively rigid enforcement [of] regulations were adopted, it seems impossible to us to prevent what would in effect be transfers to absentee owners through the mediary of residents of Western Germany"[15]. The American position, however, was not without its own contradictions. Following the stabilization of the German currency in mid-1948 and as part of the wider investment drive under the fledgling European Recovery Program, they started to argue for allowing new private foreign investment into Germany. These new investors, having paid for their German assets in foreign exchange, were supposed to have the right to subsequently convert asset returns back to their home country, while the returns of existing investments were to remain inconvertible and the use of *Sperrmark* inside Germany strictly limited (Buchheim 1990, 162). Such a policy would have resulted in discrimination of existing creditors, violating the principle of equal treatment that was otherwise defended by the US. In addition, strict discrimination between new and historic investors would likely have been an obstacle to fresh capital inflows.

[14] British officials were quite frank on the importance of that ability, seeing it as a precondition of renewed German access to commercial credit provided by British banks; See HABB Prot. der 86. und 87. Sitzung des Zentralbankrats am 24.2., 28.2, und 1.3.1951, Bericht Dr. Stedtfeld of February 20, 1951.

[15] IfZArch, OMGUS records, Shipment 11, Box 322, folder 6, Office Memorandum from Fin.Div. - Mr. Leonard to GER - Mr. Koch, March 2, 1950.

As John McCloy, the US High Commissioner for Germany, noted in a memorandum to the US Secretary of State, "[…] from conversations with potential investors we seriously doubt any substantial volume [of] new money available under existing political and economic conditions if DM's must be purchased at 4.20 rate or other fixed equivalent thereof. Moreover, new money for investment [is] unlikely while blocked DM overhang [remains]"[16]. As a consequence, and following lengthy negotiations, the American side essentially gave in to British and French demands. The embargo was lifted in June 1950 and broad opportunities for investment into German assets were opened up for *Sperrmark* owners. Furthermore, *Sperrmark* transferability among non-residents was to be introduced after an initial period of six months[17]. At the same time, direct convertibility of *Sperrmark,* including for new investment returns, was ruled out for the time being, in order to address US concerns about establishing a potentially costly precedent for a future, overall debt settlement. Even though *Sperrmark* owners were afforded indirect convertibility through the future *Sperrmark* market, the balances themselves remained locked in this way inside some type of German asset. For that purpose, they could be dispersed freely only into securities listed on official stock exchanges, as well as for verifiable building expenses. All other uses were subject to individual approval by the *Bank deutscher Länder*. Investments into German equity or loans to German companies were further subject to approval by the Federal finance and economics ministries, reunited with the Bank in an investment commission that made its decisions during biweekly meetings[18]. The commission was also charged with approving investment projects financed by foreign exchange. As far as regulatory practice was concerned, French and British negotiators insisted on liberal treatment. Any restrictions should be "no greater than applicable to German owners"[19]. The German authorities thus operated within a framework shaped by inter-Allied compromise. It was supposed to be both strict in enforcing convertibility restrictions in order to protect Germany's foreign exchange revenue, and liberal in the treatment of foreign investors. According to Allied instructions, their regulatory practice ought to at the same time "safeguard Germany's foreign exchange position, to prevent undue concentration of foreign capital in German industry and to provide equality of opportunity and treatment […] as between existing foreign owners of property, pre-war creditors and new foreign investors and German investors" (Rhein-Main Bank 1951, 21).

[16] NARA RG 59-4351. Incoming Telegram No. 1341, McCloy to Acheson, received February 13, 1950.
[17] NARA RG 59-4351. Office Memorandum to Mr. John J. McCloy from Mr. Jean Cattier, subject foreign investment policy, dated May 6, 1950, p. 2.
[18] Original English-language versions of the regulations governing foreign investment after 1950 can be found in Rhein-Main Bank (1951). The complete records of the Investment Commission can be found in the Federal Archives in Koblenz, under the records of the Federal Economics Ministry from B102.6735 to B102.6811.
[19] NARA RG 59-4531. Telegram from Frankfort, signed Hays to Secretary of State, March 13, 1950.

Just as critics in the American administration had expected, the liberal regulatory practice thus stipulated enabled sundry opportunities for secretly unfreezing *Sperrmark* balances, despite the best efforts of the German authorities. Such opportunities existed already before *Sperrmark* became legally negotiable in March 1951. In fact, they existed even before the lifting of the embargo, through the so-called hollowing out (*Aushöhlung*) of blocked accounts. For that purpose, original account holders entered into a covert agreement with the bank managing the account. Holders would thereby pledge the account as collateral for bank lending to agents of the holder in Germany, while the agents would at the same time provide some form of token collateral for audit purposes. In this way, for example, subsidiaries of foreign multinationals could gain access to debt finance from German banks with the help of the nominally frozen assets of their foreign parents[20]. Moreover, Dernburg (1955, 24) reports the early post-war existence of a *Sperrmark* black market, in which transactions were effected through irrevocable powers of attorney. The original owner, having thus sold his account, would have achieved his aim of converting his frozen assets abroad. He would subsequently become a straw man for the new, effective owners. The latter could make him transfer his blocked account from its original German banking house to another, accomplice bank, typically a small private banking house, which accepted the account as a time deposit. The accomplice bank would then provide overdraft facilities to a German intermediary, ostensibly unrelated to, but in reality against the said deposit, who withdrew the balance in cash and transferred it abroad. This could be effected either by literally carrying a suitcase of *Deutschmark* notes across the border[21], or by private clearing, in the context of which the intermediary repaid liabilities within Germany of a foreign individual or corporation in business with the effective *Sperrmark* owners abroad (so-called *Zugunstenzahlung*)[22]. In order to complete the scheme and balance the books of the accomplice bank, the effective owners would finally have the original owner apply for a licence with the German investment commission for granting a loan to the intermediary out of his time deposit, avowedly for the purpose of repaying her debts with the accomplice bank. In reality, the capital in question had long been converted abroad. These type of transactions worked because the German intermediary was either a dependent or a subsidiary of the effective *Sperrmark* owner[23], or in fact the same person – through the use of shell companies[24].

[20] The corresponding example of the Swiss Siegfried AG is mentioned in BArch B.126.1560, sheet no. 92.

[21] One example of this method is given in BArch B126.1560 sheet no. 496, Letter Zollfahndungstelle Freiburg to Staatsanwaltschaft Freiburg, April 9, 1956.

[22] See for example BArch B126.1560 sheet no. 57, Letter Zollfahndungsstelle München to Oberfinanzdirektion München, December 3, 1952, p. 4; the same transaction is described in more detail in BArch B126.1561, sheet no. 698-699.

[23] For an example of private clearing transactions involving foreign subsidiaries, see BArch B126.1561, sheet no. 104.

[24] A concise description of the practical functioning of these kind of transactions can be found in B126.1560 sheet no. 66-67. Letter of Gruppe DevÜ to OFD Nürnberg, June 18, 1952.

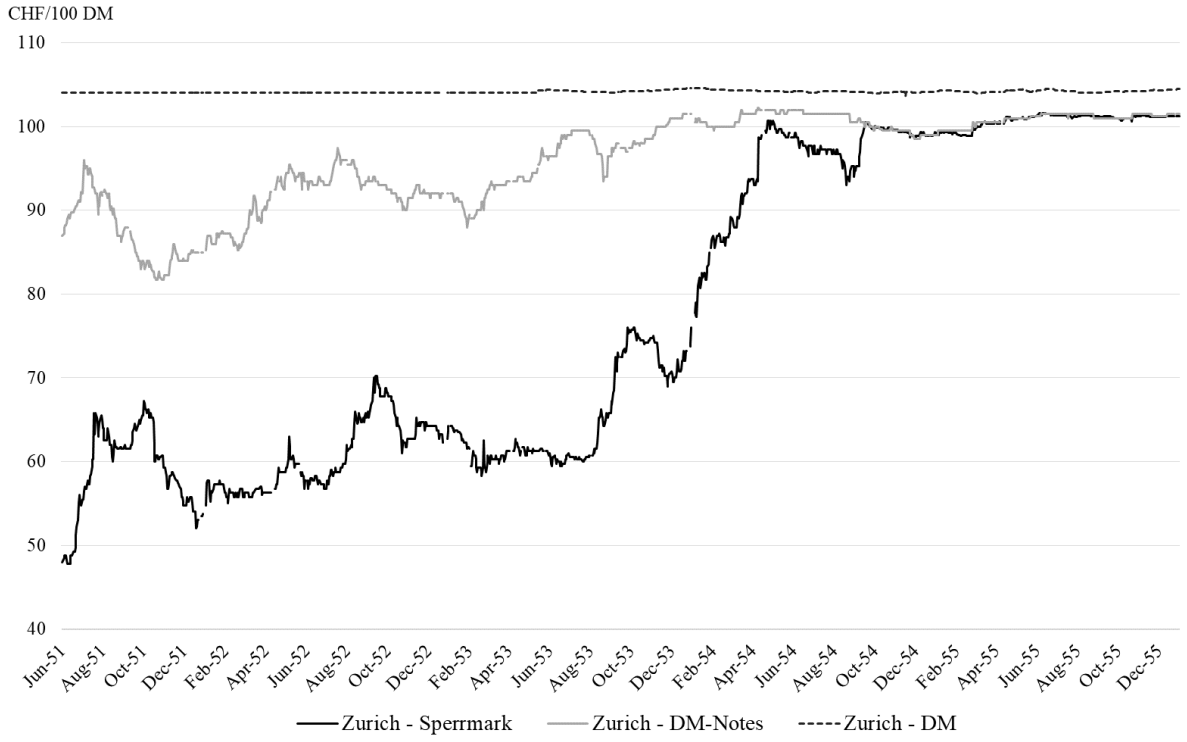
The way illegal conversion worked was clearly understood by German authorities and was believed to be widespread practice[25]. The introduction of legal *Sperrmark* tradability naturally widened conversion opportunities, and their profitability increased in the prevailing *Sperrmark* discount (Lückefahr 1958, 166). Original *Sperrmark* owners could henceforth legally sell their accounts, thereby creating a more transparent and more liquid market, which widened access to illegal conversion opportunities for interested parties that would otherwise not have been able to establish personal connections to original owners. *Sperrmark* loans could now be granted directly to an accomplice company in Germany, and the balance could be transferred abroad as soon as the investment commission had granted its approval. The high incentive towards illegal conversion via both cash transfers as well as private clearing transactions becomes clear from Table 4. During 1952, 100 DM bought as *Sperrmark* for a price of about 65 CHF could be resold for about 90 CHF in the form of *Deutschmark* notes carried across the border. As far as private clearing is concerned, a Swiss entity with liabilities in Germany amounting to 100 DM could either use the official EPU clearing mechanism for a price of about 104 CHF. Alternatively, it could arrange a private clearing transaction for a price between 65 CHF and 104 CHF, thus allowing a healthy profit for all parties involved. To make matters worse, these deals were perfectly legal in Switzerland, as Swiss courts did not recognize exchange control legislation of other countries. As a consequence, the parties involved could even sue each other in Swiss courts for not keeping up their end of the bargain[26].

Illegal *Sperrmark* transactions did not only concern outward, but also inward conversion, specifically the repatriation of pre-war German flight capital into the Federal Republic. According to Lussy et al. (2001, 38), German nationals had transferred an estimated amount of 9.5 billion *Reichsmark* abroad between 1924 and 1930. A range of intermediaries and trustees abroad had been instrumental in safekeeping these funds during the National Socialist regime and the Second World War. Here again, Switzerland played a predominant role, notably also towards the end of the War, when German industrialists sought shelter for their capital in the expectation of impending German defeat (Uhlig et al. 2001, 107). In addition, Straumann (2006, 148) notes the continuing flow of flight capital to Switzerland during the early post-war period. The Swiss government eventually froze German-owned assets in February 1945 under intense Allied pressure (Uhlig et al. 2001, 298). They were unblocked only in March 1953, following lengthy negotiations between Allied governments, Switzerland, and later West Germany (von Castelmur 1992, 390).

[25] HABB, Prot. der 90. Sitzung des Zentralbankrats am 29.3.1951, Wortprotokoll p. 2, Statement by Burkhardt.

[26] One example can be found among the decisions of the Swiss Federal Court: BGE Urteil 80 II 49, Auszug aus dem Urteil der I. Zivilabteilung vom 30. März 1954 i. S. Atlas Transatlantic Trading Co. gegen Winterstein & Co., access. via:http://relevancy.bger.ch/php/clir/http/index.php?lang=de&type=show_document&highlight_docid=atf://80-II-49:de&print=yes, last accessed on February 15, 2019, 11.35am.

Table 4: Daily prices of *Sperrmark*, *Deutschmark* notes and *Deutschmark* (official) in Zurich.



Source: Daily issues of Neue Zürcher Zeitung, Handelsteil,1951-1956.

In the meantime, German owners of flight capital who had successfully camouflaged its national origin were able to repatriate it via *Sperrmark* loans granted by their foreign trustees. Even after March 1953, using *Sperrmark* loans was much more lucrative than selling CHF proceeds to the *Bank deutscher Länder* at the official exchange rate. As the *Sperrmark* price stood at about 60 CHF for 100 DM during April 1953, illegal conversion allowed for transferring about 70% more in terms of *Deutschmark* value compared with the legal alternative[27]. The same rationale applied to any other financial claim, such as inheritances[28], that were meant to be converted into *Deutschmark* for use in Germany. The German authorities involved in the regulation of *Sperrmark* investments struggled to deal with the problem. They defended their record against internal criticism by pointing to the "very generous" Allied guidelines, which only provided for denial of licences in case applicants had previously committed infringements or if applications did not formally conform with regulations[29].

[27] One example is given in great detail in: B102.6767, Kurzmeldung Zollfahndungsstelle Stuttgart an Herrn Bundesminister der Finanzen Ref. Dr. Grill, dated June 30, 1952.

[28] One example for the conversion of inheritance claims using *Sperrmark* loans can be found under: BArch B102.6788, 94. Sitzung (7.5.1954), Liste W., Nr. 26, Begleitbericht der Oberfinanzdirektion Freiburg vom 29.10.1953.

[29] BArch B102.6745, Vermerk Bundesministerium der Finanzen Abteilung V Dev. vom 13.12.1951, p. 1: "Da die B.d.L. bei der Genehmigungserteilung an sehr großzügige Richtlinien der ABC gebunden ist, die sich ihrerseits die zur Ablehnung vorgesehenen Anträge bis vor kurzem zur Entscheidung und neuerdings zur Kenntnis vorlegen läßt, konnten Ablehnungen nur dann erfolgen, wenn dem Darlehensgeber oder Darlehensnehmer bereits früher begangene

In fact, of all the several thousands of applications for direct investment projects processed during the 122 meetings of the investment commission between September 1950 and September 1955, only about 9% were denied approval, equivalent to 10.5% of all funds invested. Moreover, the initial role of the Allied High Commission as the court of appeal for rejected applications helped enforce a liberal interpretation of regulations. Appeals were frequently successful, forcing the investment commission to revisit its earlier decision[30]. Allied supervisors could also intervene pre-emptively in case important applications touched on questions of principle. During late 1952, the *Bank deutscher Länder* was determined to prevent the opening of a new banking house in Munich which was to be financed entirely with acquired *Sperrmark*, on the grounds that investment in a bank would make supervising the use of these blocked funds virtually impossible. The Central Bank, however, was forced to change its opinion, as the Allied Bank Commission considered a rejection to be contrary to Allied regulations. Instead, the projected institute was to be treated just like any other bank without foreign ownership shares[31]. In general, as noted already by Dickhaus (1996, 145-9), the *Bank deutscher Länder* took a cautious, conservative stance towards liberalizing exchange control. Preparing for minister Erhard's visit in June 1952, the Bank took a decidedly gloomy perspective on the state of controls. It observed "enormous tendencies of capital flight"[32] and took it for granted that "almost every *Sperrmark* creditor simply wants to convert his balance one way or another"[33]. Importantly, this stance was not motivated by protectionism or a rejection of convertibility in principle. It was rather the memory of the early 1930s that haunted Central Bank officials. As late as Mai 1954, at a time when total currency reserves of the Bank already amounted to more than 2.2 billion US-$[34], its officials voiced strong reservations against large new inflows of foreign capital as long as existing liabilities had not been amortised, justifying their restrictive attitude with the "crisis of 1931"[35]. The economics and finance ministries, on their part, were dissatisfied with lax investment regulations for more traditional, protectionist reasons.

Devisenzuwiderhandlungen nachgewiesen werden konnten oder aber die Investitionsanträge formell nicht den ABC-Richtlinien entsprachen."

[30] One example can be found in the appeal filed by Keller Hops Co. Inc. of New York in November 1951, cf. BArch B102.6736, 32. Sitzung (9.11.1951), Besonderheiten zu Anträgen der 32. Komm.Sitzung, p. 1.

[31] HABB, B330.63.2, Prot. der 135. Sitzung des Zentralbankrats am 17. und 18.12.1952, Anlage zu Punkt 9 der Tagesordnung, Letter by Vocke to Bernard, of December 9, 1952, p. 2. The foundation of the new bank did not materialize after all, because it was not able to meet all requirements under the German banking law, see ibidem p. 3.

[32] HABB B330.57.1, Prot. der 122. Sitzung des Zentralbankrats am 11. Juni 1952, Vermerk, signed by Wilhelm, May 27, 1952, p. 1.

[33] HABB B330.57.1, Prot. der 122. Sitzung des Zentralbankrats am 11. Juni 1952, Vermerk, signed 6c – Devisenbewirtschaftung, May 30, 1952, p. 4.

[34] Bank deutscher Länder (1955). Statistisches Handbuch der Bank deutscher Länder, Druck- und Verlagshaus Frankfurt a. M. p. 261.

[35] BArch B102.6954 1 von 2, Niederschrift über die am 29. 4. 1954 im Hause abgehaltene Sitzung über die Zulassung neuer mittel- und langfristiger Devisenanlagen im Inland vom 6.5.1954, p. 2.

As early as 1950, their officials complained about the absence of reciprocal treatment for German companies abroad[36]. They were also in favour of restricting the scope of permissible *Sperrmark* investments. According to their views, political considerations should assume a larger role in regulation. Foreign investment should be channeled towards "valuable projects from a macroeconomic point of view", which was justified by the claim that the Investment Aid Law did the same with domestic investment[37]. The law of January 1952 established essentially a forced loan by profitable consumer goods industries for the sake of bottleneck industries that were still subject to price controls (Vonyó 2018, 189). Despite the many arguments thus brought forward, regulations themselves remained unaltered in the end. Allied supervisors were opposed to any changes, and the German side was concerned that too much pressure would endanger the liberalisation of foreign investment opportunities for German companies in turn[38]. Plans to officially restrict the scope of permissible *Sperrmark* investments were discarded, in order not to weaken the German negotiating stance during the London Debt Conference of 1951 and 1952[39]. Overall, legal changes were considered "inopportune"[40]. On the level of regulatory practice, however, frequent attempts were made to at least make illegal conversion harder. More bureaucracy was added to the application process, for example by obtaining the advice of foreign exchange offices about each case[41], or complicating disbursement formalities[42]. Moreover, the investment commission attempted to single out and reject applications that were considered especially prone to illegal conversion, while also being least desirable from their point of view. For a time, this was the case with *Sperrmark* loans to mere trading companies in order to finance imports[43]. It was the opinion of the Economics Ministry that there were already too many import companies, which were considered hardly "valuable" for the German economy[44].

[36] BArch B102.6741, Vermerk Abteilung VA6 vom 1.12.1950; such complaints appeared periodically thereafter, and as late as 1955: BArch B102/6954, Vermerk Abteilung VA13 vom 26.8.1955.

[37] BArch B102.6736, 34. Sitzung (7.12.1951), Vermerk, p. 3: „"Dr. Bergan regt an, die Investition des Auslandes entsprechend unserer eigenen inländischen Investition auf volkswirtschaftlich wertvolle Projekte zu lenken."

[38] BArch B102.6736, 27. Sitzung (7.9.1951), Vermerk, p. 1: "Grundsätzlich besteht Übereinstimmung darüber, dass eine Änderung der geltenden Investitionsbestimmungen im Sinne einer Berücksichtigung gesamtwirtschaftlicher Gesichtspunkte anzustreben ist. Es erscheint jedoch unzweckmäßig, im gegenwärtigen Zeitpunkt mit entsprechenden Vorschlägen an die alliierten Stellen heranzutreten, da einmal die Gefahr besteht, dass durch eine Verschärfung der Investitionsbestimmungen die derzeit angestrebten Möglichkeiten für eine deutsche Investitionstätigkeit im Ausland erschwert werden und zum anderen von Seiten der Alliierten Bankkommission bereits gegen unser Rundschreiben Nr. 106/51 Bedenken erhoben wurden.".

[39] BArch B102.6745, Vermerk Bundesministerium der Finanzen Abteilung V Dev. vom 13.12.1951, p. 3.

[40] BArch B102.6736, 44. Sitzung (5.5.1952), Vermerk, p. 2.

[41] BArch B102.6736, 42. Sitzung (4.4.1952), Vermerk, p. 2.

[42] BArch B102.6737, 50. Sitzung (1.8.1952), Vermerk, p. 2.

[43] BArch B102.6737, 51. Sitzung (15.8.1952), Vermerk, p. 1.

[44] This was a typical reason given internally for denying licences to importing companies, cf. for example BArch B102.6737, 42. Sitzung (4.4.1952), Anlage zum Vermerk, p. 1.

At the same time, the commission justified the rejection of such projects with the high risk of illegal conversion [45]. Convertibility in the context of import finance could be achieved primarily through over-invoicing of imports, in which the domestic recipient of the *Sperrmark* investment would pay prices for imports from the foreign investor that were above market prices. The investor would thus receive the market price that she would receive from any other importer, plus the returns on her investment, which could subsequently be used for additional *Sperrmark* finance. Transfer pricing as a method of evading convertibility restrictions had already been widely practiced during the 1930s (Frech 2001, 219). It was not only detrimental to Germany's profit tax revenue, but also to the country's foreign exchange revenue. As a consequence, special control committees were supposed to supervise prices, but the commission recognized their limited efficacy[46]. Multinational corporations with subsidiaries in Germany were particularly prone to achieve convertibility of returns in this way[47]. Royalty payments and cross-border payment of management fees posed a similar problem. Both types of transactions had been reintroduced in 1949 for the first time since the War, in each case subject to approval by the local *Land* economics ministry[48]. The transfer of production technology was officially welcomed, but regulating 'appropriate' royalty payments was at the same time notoriously hard, providing an avenue specifically for foreign industrial companies to circumvent exchange controls. The investment commission tried to minimize the problem, for example by approving applications only if royalty agreements between the private partners had already been approved by German authorities before, or by restricting the level of future payments[49]. Furthermore, *Sperrmark*-financed companies were not supposed to transfer any management fees to foreign parent companies[50]. The problem, however, remained largely unabated and was a frequent matter of complaint among officials[51]. More radical remedies to illegal *Sperrmark* conversion, however, were rejected time and again, such as revoking their tradability or centralizing their holding in a state-owned bank. This would have resulted in unequal treatment between foreign and domestic investors. The Central Bank was also concerned that this would unduly alienate serious investors and future creditors[52].

[45] BArch B102.6737, Sondersitzung (12.9.1952), Vermerk, p. 5-6.
[46] BArch B102.6736, 49. Sitzung (18.7.1952), Vermerk, p. 2.
[47] There are numerous examples of such cases in the files of the investment commission. Most prominently, Philips NV of Eindhoven was reproached by the investment commission for according a minimal profit margin to its German daughter companies, see BArch B102.6738, 79. Sitzung (25.9.1953), Vermerk, p. 3.
[48] BArch B102.6764, letter Regierungspräsidium Südbaden to Bayerisches Staatsministerium für Wirtschaft und Verkehr vom 28.11.1952.
[49] BArch B102.6736, 37. Sitzung (25.1.1952), Vermerk, p. 1.
[50] BArch B102.6736, 50. Sitzung (29.8.1952), Vermerk, p. 3.
[51] BArch B102.6738, 79. Sitzung (25.9.1953), Vermerk, p. 3.
[52] BArch B102.6737, Schreiben BdL- 6b an Hauptabteilung 6c, vom 3.3.1953, p. 2.

The antagonism between a liberal framework imposed by Allied governments and a German desire for tighter regulation was resolved on a legal level by the successful conclusion of the London Debt Agreement in 1953, as this had been the precondition for passing sovereignty over German exchange controls from Allied powers to the Federal government (Rombeck-Jaschinski 2005, 116). However, by the time the German side had regained their autonomy, the overall situation had changed fundamentally compared to only three years earlier. The rapid and continuous improvement in Germany's balance of payments within the European Payments Union since the deficit crisis of 1950/51 rendered exchange controls increasingly obsolete (Kaplan & Schleiminger 1989, 247). Large surpluses since April 1951 on the current account turned the Federal Republic into a net creditor of the EPU already by December. Surpluses persisted with the growth of German exports to Western Europe. Soon, Germany was to become the largest creditor of the clearing system by far. Already in October 1952, its 'extreme creditor' position triggered discussions on the EPU board of directors about whether Germany should introduce direct convertibility of investment returns[53]. This course of action was suggested repeatedly to the Federal Republic during the following months[54], and Germany eventually committed to start liberalisation as soon as the London Debt Agreement would be ratified (Buchheim 1990, 164)[55]. Even though the pace of liberalisation was cautious at first at the direction of the *Bank deutscher Länder*, it was accelerated when the German creditor position approached a billion US-$ in early 1954[56]. Convertibility restrictions, once impossible to enforce effectively, had become unnecessary to enforce effectively. Instead, allowing direct convertibility of *Sperrmark* at the official exchange rate, as well as virtually unblocking their use inside Germany became ways to deflect criticism by other EPU member states of Germany's tight monetary policy aggravating the country's surplus (Dickhaus 1994, 150). Controls on foreign investment projects were relaxed accordingly: The requirement for individual approval of the investment commission were dropped for loans in early 1954, and for virtually all equity capital investments in June 1955[57].

[53] HABB, Prot. der 131. Sitzung des Zentralbankrats am 15. 10. 1952, TOP 2: Devisenstatus und Außenhandelsfragen.
[54] HABB, Prot. der 144. Sitzung des Zentralbankrats am 30.4.1953, TOP 2: Devisenstatus und Außenhandelsfragen.
[55] HABB, Prot. der 154. Sitzung des Zentralbankrats am 30.9.1953, TOP 3: Transfer von Vermögenserträgnissen – Bericht über vorbereitende Besprechungen in Paris.
[56] HABB, Prot. der 160. Sitzung des Zentralbankrats am 1.6.1954, TOP 2: Devisenstatus, Außenhandelsfragen und internationaler Kapitalverkehr.
[57] Already by March 1955, German officials saw no more reason to maintain the individual licence requirements for equity investments: BArch B102/6954, Schreiben vom 4. April 1955 der Abteilung VI B 3 des BWM an Abteilung V A 12 betreffs Sitzung des Kapitaleinfuhrausschusses vom 29.3.1955, p. 4: "Devisenwirtschaftliche Gründe für die volle Beibehaltung des Einzelgenehmigungsverfahrens bestehen heute nicht mehr, zumal der Anreiz zu illegalen Transaktionen, wie er vor der Deblockierung der Sperrmark bestanden hat, entfallen ist. Das Bundeswirtschafts-ministerium will für die Beibehaltung auch keine protektionistischen Gründe mehr geltend machen und schlägt daher vor, nunmehr auch Kapitalmark-Investierungen mit dem Ziel des Erwerbs von Unternehmen oder von Beteiligungen an solchen allgemein zu genehmigen".

At the same time, liberalization was limited to capital outflows on the one hand, and *Libka-Mark* investments on the other hand. Sticking to its cautious stance, the *Bank deutscher Länder* was opposed to large new capital inflows for the time being (Buchheim 1990, 166)[58].

Sperrmark and international stock markets

Against the background of the powerful incentive for illegal activities provided by the *Sperrmark* discount until the end of 1953, *Sperrmark* transactions had acquired a certain notoriety in public opinion (Lückefahr 1958, 165). A number of spectacular instances received wide publicity in German media[59]. In order to obtain a more systematic perspective on the problem, the German finance ministry commissioned a broad investigation by regional tax offices into illegal activities concerning *Sperrmark* investments in their respective jurisdictions. Their conclusions arrived in December 1953, right at the time that the discount was about to disappear. Of the 718 *Sperrmark* transactions investigated, 246, or roughly one third, were found to involve illegal activities[60]. The results also show that as far as the licencing of projects by the investment commission was concerned, lending was much more prone to *Sperrmark* fraud than equity investments. Among the two categories, loans amount to 76 percent of detected infringements. Overall, the investigation results convey a mixed message: On the one hand, they show that a sizeable share of transactions that supposedly involved serious foreign investment in fact represented merely instruments for illegal currency conversion. On the other hand, the latter still only amounted to a minority of all transactions, even among those suspect enough to come under investigation, and even taking into account a probably less than perfect detection rate. In this sense, *Sperrmark* transactions did in fact allow for serious foreign investment during an early post-war period. This verdict is confirmed by the legitimate role of *Sperrmark* as an international medium of exchange mentioned during the introduction. On a technical level, *Sperrmark* was able to become that medium in the first place because, as far as German legislation was concerned, it was freely exchangeable among all non-residents, regardless of their particular foreign country of residence.

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[58] By August 1954, the Central Bank Council was of the opinion that German companies did no longer need foreign exchange credit, but rather fresh capital in *Deutschmark.* See HABB Prot. der 174. Sitzung des Zentralbankrats am 11.8.1954, TOP 3: Verzinsung von DM-Guthaben von Devisenausländern.

[59] Most famous at the time was the case of the so-called "Jüdische Industrie- und Handelsbank" (extensively covered by the Frankfurter Allgemeine Zeitung, for the sentencing cf. issue of 25th August 1953 "Mit einer echten Bank nur den Namen gemein", p. 4). The case surrounding an asset manager for parts of the Bavarian nobility also attracted attention (cf. DER SPIEGEL of 25th November 1953 "Die Heinzel-Männer", pp. 14-18; for a retrospective account of the same episode cf. DIE ZEIT of 22nd October 1965 "Fini, die Sperrmark-Gräfin").

[60] BArch B102.57662, Bemerkungen zur Gesamtübersicht über die Überprüfung von 718 Sperrmarkgeschäften, dated December 3, 1953.

In contrast, other countries, notably Great Britain, restricted exchange of their variety of non-resident blocked currency accounts to transactions among residents of one country or one group of countries[61]. This regulatory difference was crucial, as free international transferability facilitated the use of *Sperrmark* as an instrument for international arbitrage between financial markets. Its actual use to such ends, however, was again conditional on exchange controls in other countries, which restricted transactions not only of non-residents in domestic currency, but also of residents in foreign currency. The Bank of England, for example, restricted the type of transactions for which UK residents were allowed to use *Sperrmark.* The Bank's authorization of its use as a means to buy US-$ securities in New York provides the background of its characterisation of an international medium of exchange by the Financial Times[62]. In the absence of Pound Sterling convertibility, the existence of a market for *Sperrmark* in both London and New York allowed British investors to purchase *Sperrmark* at home, resell it New York and use the US-$ receipts thereof to buy US securities. Similarly, Dernburg (1955, 25) describes how British investors used *Sperrmark* transactions via Zurich to purchase Canadian securities. As already mentioned above, Zurich was at the center of the international *Sperrmark* market, and Switzerland more generally was the ideal hub for such international transactions at the time. It combined a convertible currency with mild financial regulation and a reputation for smooth financial intermediation already during the period (Tanner 2005). Beyond serving as an intermediary between third countries, Zurich also became the center of transactions with Germany directly, both for portfolio investment on and international arbitrage with German financial markets. Thus, it became customary to refer to Zurich when trying to infer the attitude of international financial markets towards the Federal Republic[63]. Within Germany, the movements of *Sperrmark* prices abroad, particularly in Switzerland, were frequently linked to changes in foreign investor demand on German stock exchanges[64]. Conversely, the fact that foreign investor demand was mentioned in the first place as factors of influence shows again that *Sperrmark* evidently facilitated legitimate investment transactions. As for arbitrage operations, they were facilitated by new German regulations in December 1951 authorizing the import of German stocks and their sale on domestic exchanges[65].

[61] During the period, the International Monetary Fund published an "Annual Report on Exchange Restrictions", which contained detailed overviews of the respective regulations in member countries. For the example of 1953, see International Monetary Fund (1953). For Germany, see p. 164, for Great Britain, see p. 287.

[62] The Financial Times of Thursday, October 25, 1951, p. 4: "D-Marks as International Currency".

[63] See, for example, The New York Times of Tuesday, August 18, 1953, p. 39: "Zurich interprets *Sperrmarks'* rise".

[64] See, for example, Frankfurter Allgemeine Zeitung, January 4, 1952, p. 8: „Gewinnmitnahmen am Montanmarkt"; Examples for the specific mention of the *Sperrmark* price in Zurich can be found in Frankfurter Allgemeine Zeitung, October 9, 1951, p. 7: "Sperrmark gefragt; also ibidem, August 14, 1953, p. 8: "Lebhaftes Geschäft an den Aktienmärkten".

[65] Frankfurter Allgemeine Zeitung, December 19, 1951, p. 9: „Wertpapier-Einfuhr freigegeben."

This had not been permitted earlier, as only stocks that had undergone validation were allowed to trade on official exchanges (Sayatz 1998, 72). The reform created a direct link between the market for German stocks abroad and the market for the same stocks in Germany, via the *Sperrmark* exchange rate. Given a certain *Sperrmark* rate, an increase in the price of a stock in, for example, Frankfurt made it profitable to buy it in Zurich and import it for sale in Frankfurt, subsequently reconverting the proceeds into CHF on the Zurich *Sperrmark* market. A rise in the *Sperrmark* exchange rate, given a certain Frankfurt price, provided an equivalent incentive, leading to an increase in the Zurich stock price through increased demand[66]. These transactions imply a positive correlation between *Sperrmark* and Zurich stock prices on the one hand, and Frankfurt and Zurich stock prices on the other hand.

The example of *Allgemeine Elektricitäts-Gesellschaft (AEG)* stocks provides evidence that such arbitrage mechanisms were indeed at work during the period. *AEG* stocks are especially suitable for the task. They were among the most heavily traded German stocks in Zurich already during the interwar period (Lussy et al. 2001, 48). Moreover, among all German stocks traded on the Zurich market during the early 1950s, the Neue Zürcher Zeitung reports prices most frequently for *AEG* stocks, while at the same time providing equivalent prices for the Frankfurt market. The connection between the Zurich market, *Sperrmark* and the Frankfurt market can thus be tested through a simple Vector Autoregressive (VAR) model applied to the log returns of the three time series. Specifically, I restrict the sample to the period between June 1, 1951, and September 16, 1954, the last day of the *Sperrmark* rather than the *Libka-Mark*-quote. As pointed out above, *Libka-Mark* were convertible at the official *Deutschmark* parity, which likely diluted their correlation with stock prices by effectively pegging the *Libka* price to the official parity. In addition, I take weekly averages of prices in order to avoid interpolation of data, which would otherwise be necessary, in this way also allowing for a certain sluggishness in the adjustment of prices. Finally, instead of prices in levels I use daily returns, that is, relative price changes, in order to ensure the stationarity of the series and to resolve the problem raised by the fact that the quotation of AEG stocks was converted from *Reichsmark* to *Deutschmark* in April 1953[67]. Building the VAR model, both the Likelihood-Ratio Test and the Akaike-Information Criterion suggest a lag order of One.

[66] As similar operation on the supply side of the Zurich market is detailed in Frankfurter Allgemeine Zeitung of March 14, 1953, p. 8: "Ausländer kaufen deutsche Wertpapiere".

[67] The conversion from *Reichsmark* to *Deutschmark* creates one week with extremely high returns in absolute values for each of the two stock price series. Conversion occurred in Frankfurt on April 27, and in Zurich on June 1, 1953. I resolve this problem by setting the value for respective weeks equal to zero, that is, for week 18 of 1953 for Frankfurt and for week 23 of 1953 for Zurich. Alternatively, I reran estimations after setting these two values to missing, which did not change the significance pattern of the results.

The model is therefore given by

$$\begin{bmatrix} aeg\_ffm_t \\ aeg\_zu_t \\ sperr\_zu_t \end{bmatrix} = a_0 + A_1 \begin{bmatrix} aeg\_ffm_{t-1} \\ aeg\_zu_{t-1} \\ sperr\_zu_{t-1} \end{bmatrix} + \begin{bmatrix} \varepsilon_{aeg_{ffm},t} \\ \varepsilon_{aegzu,t} \\ \varepsilon_{sperrzu,t} \end{bmatrix} \quad (1)$$

where aeg_ffm_t represents the weekly log return of the Frankfurt price of AEG stocks at time t, aeg_zu_t gives the equivalent figure for Zurich, and $sperr\_zu_t$ gives the weekly log return of the *Sperrmark* exchange rate. Table 5 shows the coefficients of the first lags in the VAR model and the results of Granger-causality tests between the three variables of interest. Importantly, both *AEG* stock returns in Frankfurt and *Sperrmark* returns Granger-cause *AEG* stock returns in Zurich. The average returns of Frankfurt *AEG* stocks and *Sperrmark* during the previous week $(t-1)$ significantly improve the forecast of the average return of Zurich *AEG* stocks during the present week (t), while this is not the case the other way round. This is plausible, given the much bigger domestic German market for *AEG* stocks and the fact that the *Sperrmark* exchange rate was subject to a range of other influences like the third-country transactions described above. Beyond the obvious connection of Frankfurt and Zurich markets for the same stock, the significant impact of *Sperrmark* returns on the Zurich market in *AEG* stocks represents the main result of this exercise. It goes to show that *Sperrmark* transactions provided a viable instrument for international financial arbitrage during the early 1950s, as they established indirect convertibility for the benefit of non-resident owners of German assets.

Table 5: Granger causality tests for *Sperrmark* arbitrage with AEG stocks.

		VAR model		Granger causality test	
Equation	Variable	coefficient	s. e.	Wald F-statistic	Prob > F
log returns aeg FFM	log returns aeg ZU	-0.049	(0.102)	0.232	0.631
log returns aeg FFM	log returns Sperr	0.128	(0.170)	0.5653	0.453
log returns aeg FFM	all			0.338	0.714
log returns aeg ZU	log returns aeg FFM	0.240***	(0.092)	6.810***	0.009
log returns aeg ZU	log returns Sperr	0.511***	(0.159)	10.340***	0.002
log returns aeg ZU	all			8.334***	0.000
log returns Sperr	log returns aeg FFM	-0.012	(0.043)	0.076	0.783
log returns Sperr	log returns aeg ZU	0.041	(0.045)	0.818	0.367
log returns Sperr	all			0.460	0.632

*** p<0.01, ** p<0.05, * p<0.1
Number of weeks = 162

Conclusion

This paper studies the historical episode of inconvertible currencies across Western Europe during the post-war period for the case of the West German *Deutschmark*. During the quarter century following the financial crisis of 1931, a range of financial claims of non-resident companies and individuals towards Germany were blocked inside the country on inconvertible bank accounts, commonly referred to as *Sperrmark*. Blocked non-resident balances represented a common feature of contemporary exchange controls across many countries. In difference to other countries, however, the particular historical circumstances of Allied occupation and the resulting specifics of exchange controls turn the German example into a showcase of how inconvertibility was in reality an aspiration rather than an actual state. A peculiar compromise between conflicting aims among Allied powers provided for a relatively liberal legal framework for practical regulation. Against this background, German exchange restrictions indeed became "a penalty on loyalty and a premium on disloyalty" (Einzig 1977, 111), as sundry opportunities for illegal conversion of blocked assets show. At the same time, the legal tradability of *Sperrmark* among non-residents implied indirect convertibility for individual owners, several years before blocked assets became directly convertible at the official *Deutschmark* exchange rate. As a consequence, *Sperrmark* became a legitimate, international medium of exchange during the first half of the 1950s, opening up foreign investment and arbitrage opportunities across national stock markets at a relatively early point after the War. The example of the market for stocks of *Allgemeine Elektricitäts-Gesellschaft* provides evidence for the smooth functioning of such operations. In this way, the establishment of official *Sperrmark* convertibility in late 1954 was really only an intermediate stage, rather than the first starting point towards full *Deutschmark* convertibility within the Bretton Woods system. Its history starts in earnest by 1950, when Allied powers decided to open up West Germany for new foreign investment.

This paper has not covered the question whether or not exchange controls were still necessary for the Federal Republic during the first half of the 1950s. Exchange controls have historically been the corollary of an overvalued national currency, in order to stem the resulting outflow of capital and the rise in imports (James 1996, 98). This connection was well understood already by contemporaries (Ellis 1941, 190). The *Deutschmark* parity has been a controversial issue in public opinion at the time as well as in the economic literature since (Delhaes-Guenther 2003, 164ff). At one extreme, Boltho (1996, 113) finds that *Deutschmark* was clearly undervalued already in 1950, and remained undervalued throughout the entire decade. At the other extreme, Buchheim (1990, 178) argues that there is no evidence for undervaluation prior to the 1960s.

From his perspective, persistently high balance of payments surpluses reflected inelastic demand for German goods abroad, rather than a fundamental currency misalignment. Building on Giersch et al. (1992, 222), it seems reasonable to assume that the *Deutschmark* had been undervalued even with respect to the US-dollar since at least the late 1950s, while it was slightly overvalued with respect to other Western European currencies during the early 1950s, following the September 1949 devaluations (Vonyó 2018, 140). This view concurs with Milton Friedman's (1953, 163) implied assessment that the German balance of payments crisis of 1950/51 wouldn't have been as severe had the *Deutschmark* not been overvalued within the contemporary system of fixed exchange rates. The history of *Sperrmark* broadly supports this view: In line with the argument made by Giersch et al. (1992, 92) based on the *Deutschmark* bank note rate in Zurich, *Sperrmark* traded at a sizeable discount with respect to the official parity up until early 1954. The discount is consistent with an overvalued *Deutschmark* until that point in time, at least with respect to fully convertible currencies like the US-dollar or the Swiss *Franc*.

CHAPTER II – Exploring the extensive margin of financial liberalization – Very early FDI into West Germany after the Second World War

This paper studies the composition of the first wave of foreign direct investment into West Germany after the end of the Second World War, across a period of roughly five years following the lifting of the Allied investment embargo in June 1950. Individual licencing requirements of the time make it possible to observe virtually the entire universe of inward investment projects in a rich archival dataset. After almost two decades during which the German economy had been cut off from international capital markets, foreign investors who had already been engaged in Germany during the interwar period play an important role for new post-war investment in several dimensions. They invest earlier and more frequently than other categories of investors, while the geographical location of their pre-war investment exerts significant influence on the locational choice of new entrants after 1950. German emigrants are also among the earliest investors, but only due to reinvestment of their existing capital within Germany. Overall, the paper reveals an example of highly persistent investment patterns across an extended and dramatic period of crisis of the international economy. By providing firm-level evidence for a comparatively early period after the Second World War, it adds an historical micro-perspective to the otherwise extensive literature on capital-account liberalization. It also provides further evidence to recent findings on the role of historic connections on the personal level in determining foreign investment outcomes.

Introduction

Extensive research has been devoted to capital-account liberalization and its economic effects. Two aspects of the empirical literature stand out: Firstly, most of it is based on aggregated, bilateral data (Edison et al. 2004): Cross-country variation in the timing and extent of liberalization is exploited in order to gauge liberalization effects on a macro-economic level, for example on FDI flows (Noy & Vu 2007) or on economic growth (Quinn & Toyoda 2008). In contrast, a number of relatively recent contributions introduce firm-level data to the debate: Larrain & Stumpner (2017) study the effect of liberalization on total factor productivity through its impact on capital allocation across firms in a sample of Eastern European countries since the mid-1990s. Desai et al. (2006) show that US multinationals react to the relaxation of local capital controls by increasing their investment in the respective market relative to other destinations. Firm-level data naturally allow addressing a wider range of questions than country- or sector-level data (Henry 2007, 918).

Secondly, the literature hardly goes further back in time than the 1960s. Especially for research based on firm-level evidence, this is simply a matter of data availability. Comprehensive FDI microdata has so far been available only from the 1970s onwards. In the case of Germany, for example, the MIDI database provided by the *Bundesbank* covers all firm-level FDI into and out of the Federal Republic starting in 1976 (Lipponer 2011). As a consequence, existing research on earlier periods has been limited to studying indirect evidence, in the form of more readily accessible financial data such as stock returns (Voth 2003). Exploiting firm-level evidence on FDI is thus restricted to a period prior to which the international economy had been highly integrated for decades. Exports across Western Europe grew by around 10% each year during the 1950s and 1960s, and continued to grow thereafter (Eichengreen 1996, 54). Western European currencies transitioned to full current-account convertibility during the second half of the 1950s (James 1996, 85), at a time when international finance resurged due to the development of euro-dollar markets (Schenk 1998). Lagging behind trade by about a decade, international investment started to expand during the late 1950s, and grew rapidly during the 1960s[68]. Financial liberalisation remained fragile, and FDI was largely limited to Western industrialized economies until the 1980s (Jones 2005a, 98). Among the latter group of countries, however, international investment was able to flourish without any major reversals for decades. Thus, developing countries since the 1980s and Eastern Europe during the early 1990s opened their capital account to a well-integrated Western world economy. From a global point of view, existing firm-level FDI data therefore only covers the intensive margin of liberalisation: One country or a group of countries at a time is added to the established choice set of historically developed FDI destinations. This paper contributes to the literature by offering a glimpse at the extensive margin of very early FDI after the end of the Second World War: Before Allied occupation authorities lifted the post-war embargo on new incoming FDI in June 1950, Germany had been isolated from international capital markets for almost twenty years. The *Reich* government reacted to the 1931 financial crisis by imposing stringent capital controls that were tightened further during following years (Banken 2006). The Second World War subsequently brought international capital flows everywhere to a halt, a situation that lasted well into the early post-war period (Obstfeld & Taylor 1997, 26). At the time, early liberalization measures such as the lifting of the German embargo in 1950 represented the first cracks in an investment environment that continued to be highly regulated for almost another decade. While early FDI remained quantitatively small under these circumstances, it laid the groundwork for the subsequent investment boom towards the end of the 1950s.

[68] For the case of Germany, see Table 6 below.

Observing the extensive margin at all is made possible by the fact that individual investors required a permit for every single FDI project, regardless of its size, for several years after June 1950. This results in a rich archival data set of several thousands of investors, who represent virtually the universe of FDI into West Germany (excluding West Berlin) during the period. I complement these data with information on all US corporations holding assets in Germany by 1943, retrieved from wartime US Treasury files.

The comparison drawn with 1990s Eastern Europe is informative in another respect: In the context of early capital flows from West to East Germany following reunification, Burchardi and Hassan (2013) show that individual investor characteristics matter for investment decisions. A high population share of West Germans with historic ties to East Germany significantly increased corporate investment flows from their West German home regions to the East. The importance of who invests in general, and of historic connections specifically, is confirmed in a different context by Burchardi et al. (2018). As of the year 2014, ancestral relations on the level of US counties had a significant influence on the geographical distribution of the investment activity of local companies across foreign host countries. The present paper provides evidence broadly in support of these findings: Despite two decades of crisis and war, firms and individuals who had already invested in Germany before the Second World War are the most important protagonists among the first wave of post-war FDI into the Federal Republic. These pre-war investors invest earlier and more frequently than new entrants. Moreover, they were not only prominent post-war investors themselves, but their historic presence also served as reference for new entrants. The number of companies under considerable foreign ownership at the time of liberalization significantly predicts the locational choice of new equity investment projects across German districts (*Landkreise*) during the following five years. This is in line with evidence from the extensive management literature on FDI location choice, where local agglomeration of foreign-owned enterprises helps overcome the "liability of foreignness" otherwise experienced by new entrants in a host country (Nielsen et al. 2017). Besides pre-war investors, individuals identifiable as German emigrants also invested significantly earlier than those from other ethnic backgrounds. However, this is due to the fact that they reinvested disposable funds which they retained inside Germany. Their prominent role vanishes once the sample is restricted to investments made with new capital.

My findings also complement the historical literature on the post-war German economy. Vonyó (2018, 150) recently confirmed earlier findings that the geographical pattern of West German foreign trade during the "miracle" years recovered its traditional, interwar pattern, despite diversion attempts by the National Socialist regime.

I am able to add a micro-level analogy to such persistence in the geography of foreign trade, by showing the prominent role of pre-war investors for inward FDI after 1950.

Importantly, the post-war role of pre-war investors cannot simply be explained as autocorrelation over time: These empirical findings are derived exclusively from the set of cases in which foreign firms or individuals planned to invest additional amounts of their foreign capital into German companies. This excludes all cases of reinvestment of German assets the investor already owned before, directly or indirectly. At the same time, retained earnings were by far the most important source of corporate finance all across Western Europe during the period (Straus 2011, 211), and this was no different for existing subsidiaries of foreign parent companies in Germany (Wilkins 1974, 308). Moreover, these subsidiaries were able to tap the local capital market for debt finance. From a narrowly financial point of view, therefore, pre-war investors should actually have been less likely to invest additional foreign capital compared to new entrants. They already owned assets inside the country that could generate the funds necessary for investment or that could give them access to the German capital market. New entrants, on the other hand, could enter the German market only by investing new foreign capital (Kiesewetter 1992a, 69).

Otherwise, autocorrelation could arise due to two types of composition effect: Firstly, Felbermayr and Jung (2011) show that in theory, only sufficiently productive companies will engage in outward FDI at any point in time. This introduces sorting among potential investors within their respective home countries, which might have remained unaltered for decades. Historic investors were potentially still the only companies able to engage in FDI after the War, thus explaining their predominance. Available evidence for investment by companies from the most important source country runs counter to this contention. According to Kiesewetter (1992a, 72), the fluctuation among US corporate investors was in fact much higher than suggested by the limited number of large multinationals active on the German market. In 1943, 124 US corporations owned a German subsidiary. In contrast, the number of US companies with FDI in Germany had grown to 370 by 1958 and to 555 by 1960 (Hartmann 1963, 35). It seems implausible that post-war entrants were technologically and financially incapable of entering the German market during the first half of the 1950s, while they were perfectly capable of doing so a few years later. Secondly, the post-war investment data suffer from right-truncation, as they contain no information on potential investors who chose not to invest or might have done so immediately after the end of the period under investigation. At the same time, pre-war investors differed as to the relative importance Germany had for each individual investor among all her pre-war destination countries. The combination of these two facts could explain the observed prominence of pre-war investors in the post-war data.

The latter might simply pick up the right tail of the distribution concerning the relative importance of Germany for pre-war investors, because higher historic importance could plausibly explain earlier investment after the War. If this were true, it would not be surprising that pre-war investors observed in the truncated post-war data invested more and more frequently than new post-war entrants. Evidence available for US corporations with a pre-war German subsidiary, however, does not support this conjecture. The relative importance of Germany as a destination country during the interwar era does not explain which corporations were active during the post-war period under investigation.

The definition of foreign direct investment employed in this paper is driven by the scope of the underlying historical sources. It does not aspire to include every type of transaction classifiable as FDI more generally. Investment is direct for two reasons: Firstly, direct investment as understood in this paper describes the employment in a German company of foreign-owned capital directly by the foreign capital owner herself or by a foreign intermediary on her behalf. As a result, it does not include acquisitions carried out by existing German subsidiaries of foreign parent companies, even though such transactions increased total assets owned by the foreign parent within Germany. Secondly, it is direct inasmuch as the transactions under consideration occur outside organized stock exchanges, directly between the foreign investor and the destination company. In this sense, the definition is broader than the one employed by Jones (2005b, 5), for whom managerial control over the investment destination distinguishes FDI from portfolio investment. In this paper, fractional equity participations also classify as direct investment, as long as they are based on a direct, in the sense of personal, relation between investor and destination company. Finally, beyond actual equity investments, the historical sources also contain all direct loans by foreign companies or individuals to domestic companies for the sub-period until the end of 1953. All estimations performed separately for that sub-period are based on a joint sample of both equity investments and direct lending. On the one hand, the underlying interest of this paper lies with the willingness of foreign investors to commit additional foreign capital to the German economy during the early 1950s, rather than with the distinction between equity capital and debt capital on company balance sheets. On the other hand, that distinction is fluid in case the creditor is identical with the foreign parent company, as is frequently the case in the post-war data. Moreover, contemporary investment regulation stipulated a minimum maturity of three to five years for projected loans. Short-term loans are thus not part of the post-war data, while they would be least similar to equity capital.

The scope of the data and the resulting definition of FDI will receive further detailed attention over the course of this paper. At first, however, the next section will introduce the historical context of foreign investment in Germany during the early 1950s. This will be followed by a thorough discussion of the data used, and separately of a number of important caveats to their interpretation. Estimation results subsequently presented precede the conclusions summarized in the final section.

Foreign investment in Germany

Few contributions to the historical literature on FDI into Germany provide comprehensive summaries of the topic at hand. Pohl (1992) combines several papers on different source countries, discussing their respective historical influence on the German economy. Eck (2003) studies the performance of French companies on the German market during the quarter century following the end of the Second World War, while Wubs (2012) conducts a similar exercise for Dutch multinationals. Otherwise, the literature mostly consists of monographs on individual, large multinational enterprises. A number of their German subsidiaries have been the subject of corporate biographies, as for the case of Saint-Gobain (Möller 2001) or British Petrol (Förster 1979). The focus on MNEs can be explained by the fact that they dominated foreign investment quantitatively throughout history. According to Wubs (2008, 41), direct investment by just the Anglo-Dutch Unilever conglomerate equalled roughly 80 percent of the 1940 value of total US manufacturing FDI in Germany. Similarly, General Motors acquired the largest European carmaker, Adam Opel AG, between 1929 and 1931. This was done for the enormous sum of 33.3 million US-$ (Turner 2005, 3), which was equivalent to almost a quarter of the 1929 stock of US manufacturing FDI in Germany (Wilkins 1974, 185). A number of relatively recent contributions has resulted from the political controversy inherent in heavy financial involvement with National Socialist Germany. These include studies on American carmakers (Billstein et al. 2004), General Motors in particular (Turner 2005), International Business Machines (Heide 2004), British multinationals (Forbes 2000, 133) and Unilever (Wubs 2008). For Switzerland, an historical commission has published extensive findings, on a selection of Swiss companies from different sectors (Ruch et al. 2001), as well as specifically on large chemical corporations (Straumann and Wildmann 2001) and on the armaments sector (Hug 2002). The dual focus on large corporations and the pre-1945 period limits the scope of the literature: On the one hand, there is scant evidence on the experience of small and medium-sized companies, even though they represented the vast majority of investors. On the other hand, little is known about the interlude between the end of the Second World War and the investment boom of the 1960s.

This blank spot risks forgoing interesting historical lessons, as it is situated right at the time when foreign investment was allowed to resume following a very long and severe crisis. As a matter of fact, the lifting of the Allied embargo in June 1950 occurred on the background of a turbulent half-century for foreign investors, in the context of which the aftermath of the 1931 financial crisis only represented the final of four distinct periods for FDI into Germany: A first wave of FDI at the turn of the 20th century ended abruptly with the First World War, while the short-lived investment boom during the second half of the 1920s gave way to crisis and dictatorship.

Industrialists from neighbouring countries had been active in the different German states already during the 18th and early 19th century, as was the case for Swiss textile manufacturers in the later territory of Baden (Boelcke 1987, 130) or Belgian heavy industry in the vicinity of Aix-la-Chapelle (Devos 1986, 107). French glass-makers started to open German subsidiaries as early as the 1850s (Möller 2001, 21). Large-scale manufacturing FDI, however, only occurred around the turn of the 20th century. Thus, the Singer Manufacturing Co. decided to start production in Germany in 1902, even though it had serviced the German market since the 1860s (Blaich 1984, 28). Similarly, McCormick (International Harvester) had sold its agricultural machines via sales agents for decades before it opened up a factory in Neuss in 1908 (Kiesewetter 1989, 122). Standard Oil opened a network of refineries in Germany around 1910 (Kiesewetter 1992b, 180). The Swiss chemical company Geigy opened a factory on the German side of the Rhine in 1898 (Straumann & Wildmann 2001, 59), while its compatriot Maggi did the same in 1897, followed by Alusuisse in 1898, Brown Boveri & Cie. in 1900 and Nestlé in 1903 (Ruch et al. 2001, 73). This mushrooming of subsidiaries of foreign companies in Germany around 1900 has been explained by a combination of three factors: The upswing of the global economy during the 1890s led to an internationalization of industrial production everywhere. German patent law stipulated timely exploitation of the patented process and thus forced some foreign innovators to start production in the country (Blaich 1984, 9). Finally, rising protectionism towards the end of the 19th century made market access conditional on localized production (Bläsing 1992, 75). However, the investment boom came to a sudden halt at the beginning of the First World War. Just like other belligerents, the German Empire sequestered and subsequently expropriated enemy assets (Lindner 1991, 16). Compensation for, or reacquisition of lost assets after the War was costly and could take several years. Specifically for Great Britain, Jones (1992, 102) argues that this negative experience may explain the relatively small share of British investors in German inward FDI during the following decades, when compared with the predominant role of British capital on a global scale. Nevertheless, the Weimar Republic experienced an unprecedented inflow of foreign capital after the stabilization of its currency (Ritschl 2002).

US investors in particular supplied the bulk of the capital inflow, to the extent that interwar Germany became "the main base of the US in Europe" (Berghahn 1986, 22). Even though an important part of this inflow took the form of German bonds on the US market, corporate FDI surged as well. Record investments were made, notably in the car industry. Dutch multinationals also invested heavily, taking advantage of the Amsterdam capital market to finance their German acquisitions (Wubs 2012, 18). Importantly, the FDI surge was not limited to long-time foreign investors with pre-war experience of market conditions in Germany. Examples of prominent new entries include the US car industry mentioned before, as well as Swiss pharmaceutical companies (Straumann & Wildmann 2001, 165), the Italian FIAT (Hertner 1992, 51), or the Anglo-Iranian Oil Company (Förster 1979, 124). In any case, the interwar investment spree lasted only for a few years, as worldwide capital flows started to decrease considerably by 1928 (Eichengreen & Accominotti 2016). Foreign capital owners began to withdraw their funds from Germany by 1930. The country experienced a quick reversal of the high inflows of preceding years (Ritschl 2012, 13). Capital flight became rampant as the crisis proceeded, and the government reacted by imposing capital controls in July 1931 (Schnabel 2004). Foreign investors were barred henceforth from liquidating their German assets and converting the proceeds, while asset returns remained convertible for the time being. This changed fundamentally with the advent of the National Socialist regime, which defaulted on virtually all of the country's external liabilities in June 1933 (Clement 2004, 38). International payments were highly bureaucratized, and it became ever more difficult to legally convert returns into the currencies of foreign parent companies (Boelcke 1994, 21). Any payments due to non-residents had to be either reinvested or credited to frozen non-resident accounts, commonly known as *Sperrmark* (Dernburg 1955). The regime had a profound impact on foreign investors beyond convertibility concerns. The growing importance of public procurement contracts for financial success, combined with aggressive economic nationalism made the position of foreign subsidiaries precarious (Turner 2005, 44). In the short run, parent companies reacted with appeasement: "Non-Aryan" employees were quickly removed from payrolls (Straumann & Wildmann 2001, 168). Subsidiaries took great pains to become certified as "German" companies in spite of their foreign ownership (Heide 2004, 158). Regime loyalists had to be installed on company boards and as powerful employee representatives. Foreign parents managed to retain legal ownership of their subsidiaries, despite attempts to the contrary, often by local Nazi officials (Turner 2005, 68). The price was the gradual loss of managerial control (Boon & Wubs 2016). Profits inside Germany grew quickly, however, especially for companies profiting from the armaments boom (Ruch et al. 2001, 92). In the medium run, foreign multinationals attempted to weather the regime and retain all future options, while minimizing financial exposure.

Subsidiaries thus actively sought regime contracts in order to retain their German market share (Turner 2005, 31). Excess liquidity from inconvertible profits was hedged by investing it broadly across the German economy, without necessarily any connection to core business. The American food processing giant *Corn Products Refining Company,* for example, eventually ended up owning a music hall, a cement factory and a typewriter producer, among other assets[69]. Multinationals deemed sufficiently important for the German economy were also allowed to convert parts of their profits by special deals, such as shipbuilding contracts for German shipyards (Wubs 2008, 48). At the same time, foreign parents avoided supplying fresh capital to their German subsidiaries, and increasingly so the more likely war became. In March 1939, General Motors decided that "no commitment shall be made in respect to our German operations that will involve the investment of any additional dollars in Germany" (Turner 2005, 87). Around the same time, Geigy refused to supply any more Swiss *Francs* for the expansion of its German subsidiary (Straumann & Wildmann 2001, 97). At the outbreak of the War, enemy companies lost all remaining control of their subsidiaries (Förster 1979, 210). This was the case even for some parents located in neutral countries (Ruch et al. 2001, 279). Enemy assets were sequestered, yet owners were not expropriated (Möller 2001, 124). Sequestration could even turn out to their advantage, as it protected their assets from hostile takeovers by German competitors or the SS (Lindner 1991, 85). By that time, on the other hand, foreign parents had likely written down their German assets. When the US entered the War, Congress introduced a special write-off facility for any property of US multinationals located in enemy territory (Kent 1943). By 1943, virtually all companies concerned had taken advantage of this opportunity.

Perhaps surprisingly, the regulatory framework of FDI changed little with the Allied Occupation of Germany at the end of the War. Foreign assets continued to be sequestered for the time being. Even though owners were able to investigate their fate, they were barred from either taking control or injecting fresh foreign capital (Förster 1979, 233). Treatment of foreign assets subsequently depended on their location: Those located in the Soviet zone were eventually expropriated without compensation, just like most other private enterprise (Hartmann 1963, 48). Those located in the three Western zones were gradually decontrolled[70]. Managerial control of subsidiaries by non-resident owners was restored in July 1948 and the former were allowed to operate much like any other German company by the end of 1949.

[69] NARA RG 256, Entry Code NC8-2, Box 484.

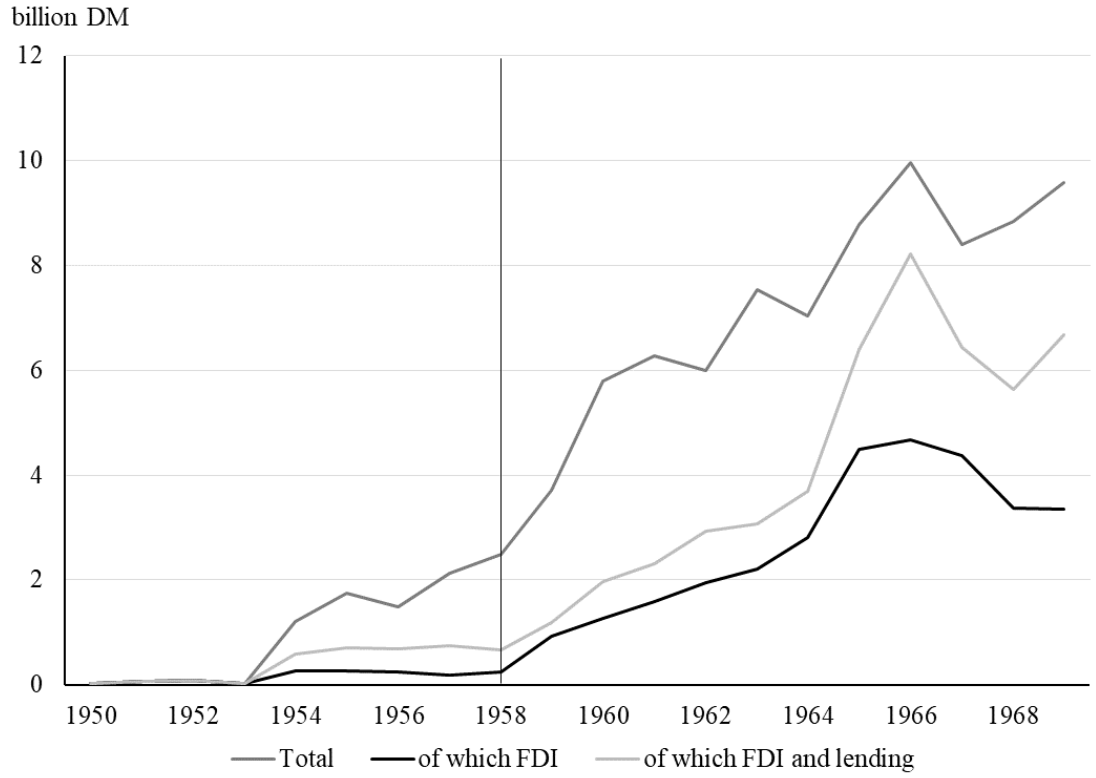
[70] The following chronology of FDI regulation can be verified in Kühne (1984), who provides an extremely detailed account of West German exchange control legislation between 1945 and 1961. During that period, Allied occupation laws governed exchange control, while the respective Federal German law was passed only at the latter date.

The owners could also liquidate their assets since May 1949. Liquidation proceeds, like any other non-trade payments due to non-residents, however, remained inconvertible. A simplified version of the pre-war *Sperrmark* system was retained after the War (Dernburg 1955, 22). At the same time, the prevailing investment embargo meant that subsidiaries could not draw on their foreign owners for financial help, and the latter were allowed neither to import new capital into Germany, nor to spend their frozen funds for the benefit of their subsidiaries, except for the narrow purpose of physical reconstruction. Removing the embargo in June 1950 thus represented the first major step towards liberalization of foreign investment into Germany after the War. Henceforth, *Sperrmark* owners were authorized to spend their frozen funds for virtually any immovable asset inside Germany. They could do so without any further regulatory interference for portfolio investment purposes. For each individual direct investment project, including direct loans to residents, they required the prior permission of a specially established Investment Commission made up of *Bank deutscher Länder* and Government officials. Potential investors without their own *Sperrmark* were able to invest on the same terms by selling foreign exchange to the *Bank deutscher Länder*. Even though the resulting amounts were small, it opened up a window for new capital inflows for the first time since the end of the War. In addition, *Sperrmark* became legally tradeable among non-residents in March 1951. As these 'acquired *Sperrmark*' traded at a sizeable discount on international markets until late 1953, they represented a cheaper and readily available alternative to foreign exchange. In fact 'acquired *Sperrmark*' and their substitute after September 1954 ('*liberalisierte Kapitalkonten*' or *Libka-Mark*) remained the primary instrument for foreign investment until 1958, as the *Bank deutscher Länder* was reluctant to allow large new inflows of foreign capital via foreign exchange for the time being (Buchheim 1990, 165). Thus, the capital account of the German economy continued to be tightly regulated despite these significant steps towards liberalization. Nevertheless, investments with acquired *Sperrmark* represented genuinely additional capital expenditures for the individual non-resident investor, as she exchanged her foreign assets for assets inside the Federal Republic. That is the case even though existing liabilities were merely exchanged among non-residents on the macroeconomic level, and only the eventual investment returns represented an additional charge on the balance of payments. These returns remained directly inconvertible until February 1954, when they became transferable at the official *Deutschmark* parity, while they had been indirectly convertible at the prevailing discount via the *Sperrmark* market since March 1951. Just as investment returns became directly convertible in February 1954, direct loans to German companies were liberalized to a large extent, while the individual requirement for an Investment Commission permit in the case of equity investments was retained until June 1955.

Aggregated data for foreign investment into Germany are available only for the post-war period. Table 6 gives gross inflows for several categories of long-term, private foreign investment during the two decades following the lifting of the Allied investment embargo. According to Bundesbank (1976, 336), the definition of FDI as a subgroup of total investment includes all investment into non-securitised equity, investment into share capital if foreign ownership exceeds 25%, long-term loans to foreign subsidiaries in Germany, as well as reinvested earnings. The figure for lending is thus already adjusted for intercompany loans. The remaining difference between FDI and lending on the one hand and total foreign investment on the other hand consists almost exclusively of portfolio investments. Table 6 therefore yields a comprehensive measure of FDI, which shows the clear discontinuity in the data between the 1950s and the 1960s. FDI remained at low levels until 1958 and picked up the year later, with an additional sharp increase during the mid-1960s. A comparable pattern can be identified for portfolio investment. *Bank deutscher Länder* policy to restrict foreign investment largely to *Sperrmark* and *Libka-Mark* before 1958 was evidently effective. By implication, it represents evidence that the records of the investment commission charged with licencing *Sperrmark* (and foreign exchange) investments actually do match the universe of inward FDI during the early 1950s, however defined, and however low the aggregate amount invested.

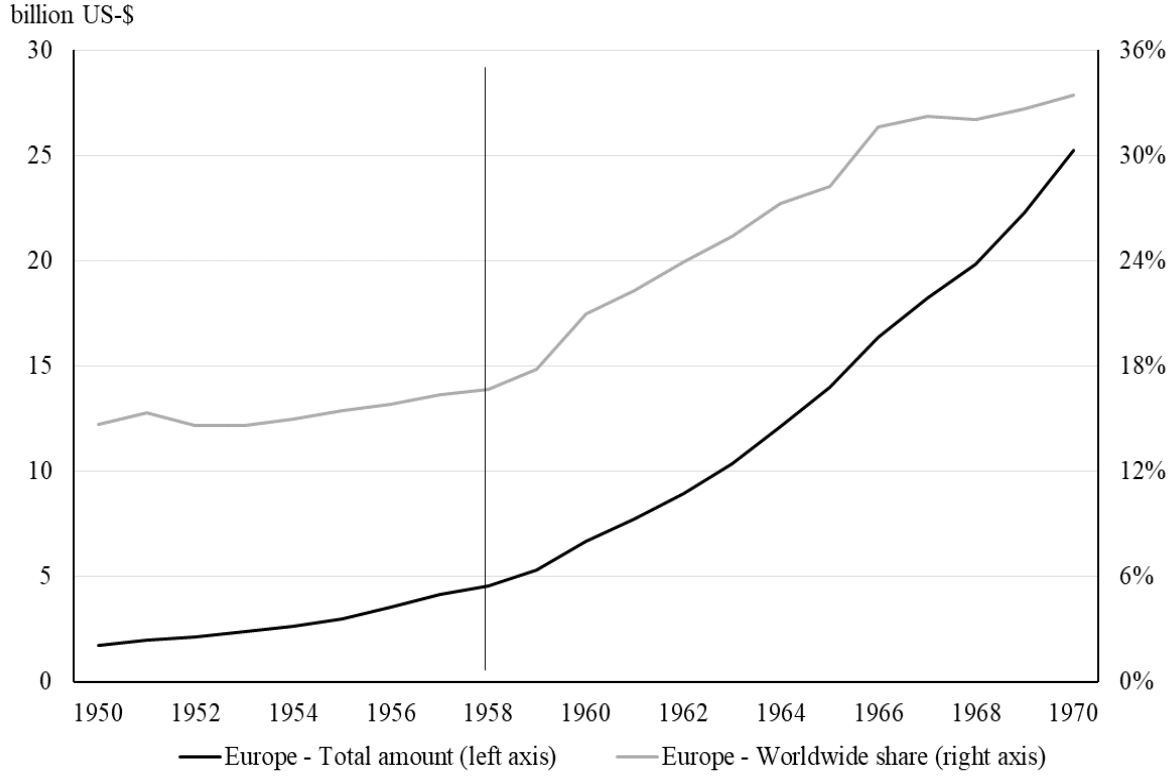
At the same time, the dichotomy between two distinct post-war phases was not peculiar to Germany, as indicated by the development of US outward FDI to Europe presented in Table 7. According to the US Department of Commerce (1981, 39), the direct investment position abroad describes the net book value of US direct investor's equity in their foreign affiliates, including outstanding loans. It provides a similarly broad measure to the German aggregate in Table 6, as it includes reinvested earnings and intercompany receivables of the US parent corporation. Growth in the European position of US investors picked up considerably during the early 1960s, both in absolute value and as a share of worldwide American FDI. Berghahn (1982, 153) attributes the discontinuity to the prospect of the Common Market, which attracted investors to Western Europe. Another explanation can be found in the maturing of the Bretton Woods system. All Western European currencies moved to full non-resident convertibility on the current account in late 1958, after eight years during which the European Payments Union had ensured convertibility only of trade payments among its members (James 1996, 85). Incomplete convertibility of European currencies is one major factor for explaining the paucity of cross-border capital flows during the first half of the decade. In fact, Wilkins (1974, 342) directly attributes the growth of US investment in Europe to the restoration of convertibility.

Table 6: Gross inflow of long-term, private foreign investment into Germany, 1950-1969.



Source: Deutsche Bundesbank (1976). Deutsches Geld- und Bankwesen in Zahlen 1876-1975, Fritz Knapp Verlag, p. 343.

Table 7: United States - Direct Investment Position Abroad, 1950-1970.



Source: United States Department of Commerce (1981). Survey of Current Business (61/1), p. 50-51.

Contemporary sources support the connection between convertibility and FDI growth. In April 1951, the US President's Committee for Financing Foreign Trade commissioned a report on "Obstacles to Direct Foreign Investment".[71] The report was based on a survey of US corporations that had been engaged in FDI already, and processed the answers according to the type of obstacle encountered. For the case of Germany, convertibility concerns were paramount. 26 out of 39 respondents complained about existing limitations on remittance of profits, 19 mentioned control of capital movements, and 20 saw import quotas as an obstacle. In contrast, virtually no one raised concerns about restrictions on foreign investment within Germany, taxation or government instability[72]. Despite the clear verdict, these findings nevertheless need to be qualified in two important dimensions: On the one hand, the number of respondents is low, amounting to roughly a third of all US corporations with pre-war subsidiaries in Germany, thus raising the question of self-selection. More importantly, convertibility does not seem to have been an end in itself, but rather signalled the return to a normal investment environment. Otherwise, investors would have converted most of their liquid assets as soon as direct convertibility had been restored. This was not the case, however, as shown by contemporary *Bank deutscher Länder* figures. During the second half of 1954, i.e. right after asset returns had been unblocked, only 37% of dividends and other profit participations accruing to US citizens were converted immediately. The remainder was voluntarily deposited as *Sperrmark* (*Libka-Mark*)[73].

The data

The Investment Commission charged with licencing inward FDI projects met 122 times between September 1950 and September 1955 and in the process ruled on more than 6,000 applications. For each of these bi-weekly meetings, its records[74] contain a list of the applications under consideration, with information on each FDI project in condensed form. It yields the name and place of residence of the investor and the investment destination, the type of project (equity investment, loan, or other residual types), the amount of money invested and the source of these funds ('original' *Sperrmark*, 'acquired' *Sperrmark* or foreign exchange). It also states the prior relation of investor and destination, and whether the application was approved, denied or deferred.

[71] National Industrial Conference Board (1951). Obstacles to Direct Foreign Investment, Report Prepared for The President's Committee for Financing Foreign Trade.
[72] National Industrial Conference Board (1951), p. 299.
[73] HABB, B330.2849, Vermerk Abteilung 6a/610 an Abteilung 653 vom 11.5.1955, betr. Deutsch-amerikanisches Doppelbesteuerungsabkommen, p. 2.
[74] The files can be accessed in the German Federal Archives in Koblenz, under the records of the Federal Economics Ministry from shelf marks B102/6735 to B102/6811.

For the investment destination, it additionally contains the legal form, founding year, pre-existing nominal capital, and economic activity, which allows to attribute the destination companies to different sectors of the economy. Moreover, if the project involves a loan, its interest rate, duration and type of security is provided, as well as a broad description of the intended use of the funds invested. Detailed application papers are available for most projects[75], which contain the actual form and expert opinions of *Land* authorities in which the destination company was located. From case to case, these documents allow for collecting a range of additional information on the projects concerned. For estimation purposes, however, only such information is used which is in principle retrievable for all projects. Being able to distinguish projects with respect to the type of funds employed represents a fundamental advantage of the data. It allows to discriminate investors according to whether they planned to invest additional foreign, i.e. "new capital", in the form of foreign exchange or acquired *Sperrmark*; or whether they only reinvested "existing capital" they already possessed within Germany, in the form of their own *Sperrmark* or equivalent liquidity. Observability of the ultimate decision rendered by the investment commission on each individual project represents a second, crucial advantage. In fact, the licencing regime was fairly liberal and most applications were approved, even if they were deferred to further consideration for a while[76]. Overall, only 9% of all projects were denied. Nevertheless, being able to observe both ultimately approved and ultimately rejected projects prevents selection bias coming from the regulatory process on the German side.

Besides these advantages, the data are burdened with a number of complexities regarding their digitisation and the subsequent construction of variables for estimation purposes, distinct from problems of data interpretation that are addressed separately below. First of all, based on the information available from the commission records, applications can be reliably dated only to the quarter in which they were submitted, rather than to a monthly or daily frequency[77]. Moreover, projects for which detailed application papers are not retrievable from the records cannot be dated by themselves. To solve this problem, I assign to them the rounded average quarter of submission across all datable applications discussed in the same commission meeting. Finally, the ultimate consistency of the data set requires the exclusion of a range of applications before the data can be used for meaningful interpretation and estimation purposes.

[75] Application papers are missing for a small minority of projects due to their contemporary refiling with other government departments or agencies that took an interest in them. Their current whereabouts are not traceable.
[76] For details see Chapter One.
[77] Applicants submitted their papers at their respective *Landeszentralbank*, and it typically took three months until the Investment Commission reached a decision on the federal level. Thus, even though the individual licencing requirement was abolished only in July 1955, the Commission data contains the universe of FDI projects only until the end of March 1955. All applications remaining in the process were summarily approved by September 1955.

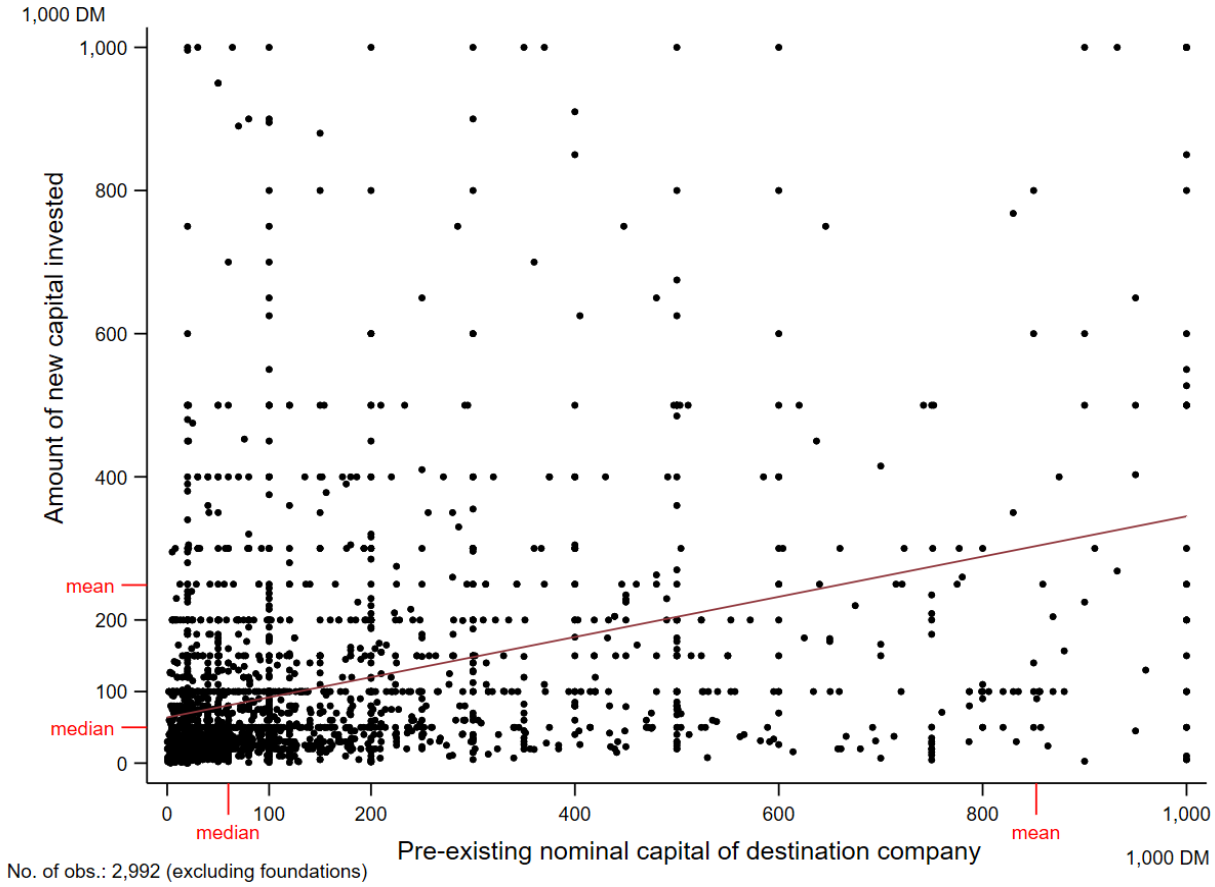
One important example for this requirement is the occurrence of *Sperrmark* fraud described in Chapter One. Illegal conversion attempts gave rise to bogus investment applications. They were bogus in the sense that they did not express a serious willingness to invest capital on a long-term basis in Germany, but simply represented a means for covertly transferring capital across the border. Appendix C discusses the different reasons for excluding applications in detail and lists all corresponding applications by the reason for their exclusion. Once these applications are excluded, and given the regulatory history outlined above, the final data contain the universe of both equity investment and direct lending projects within the Federal Republic planned by non-resident applicants between July 1950 and December 1953, and the universe of equity investment projects between July 1950 and March 1955. Specifically, they contain all projects directly involving the non-resident applicant and a German company located within the three Western zones of occupation. They do not include real estate transactions that did not involve a company on the German side, nor charitable loans from abroad to private individuals. Importantly, they also do not include West Berlin. Regulations governing foreign investment were based on Allied occupation laws, and the special Cold War status of Berlin led to a separate licencing regime for West Berlin, the records of which are irretrievable[78].

A number of stylized facts summarize the commission data: Firstly, the population of investors is composed of a small number of very large multinationals, and a very large number of small investors. Table 8 matches new capital invested with pre-existing nominal capital of the destination company, for the entire dataset except company foundations. For both variables, the mean is much higher than the median. While the median investors spent 50,000 DM per project, a few very large investments drove the mean to approximately five times that value. Similarly, the median destination company was equipped with about 60,000 DM of nominal capital, and a mean of about 853,000 DM. Taking out the 1% largest companies reduces the mean to roughly 308,000 DM. In comparison, the mean German limited company had nominal capital of about 233,000 DM at the end of the 1953, 7.5 million DM being the equivalent value for stock companies (StJB 1954, 213). An early conclusion of the paper therefore lies with the observation that the first wave of FDI into Germany after the end of the Second World War is not at all restricted to the small number of large multinationals that much of the historical literature on international investment is focused on. The fact that even in the early 1950s, these few corporations dominate purely in terms of money spent obscures the rich variety of small and medium-sized enterprises that newly enter into Germany or return to the country just as early.

[78] The separate Berlin regime is mentioned e.g. in BArch B.102.6739, 89. Sitzung (19.2.1954), Vermerk, p. 3.

Table 8: Amounts invested and pre-existing nominal capital of destination companies.

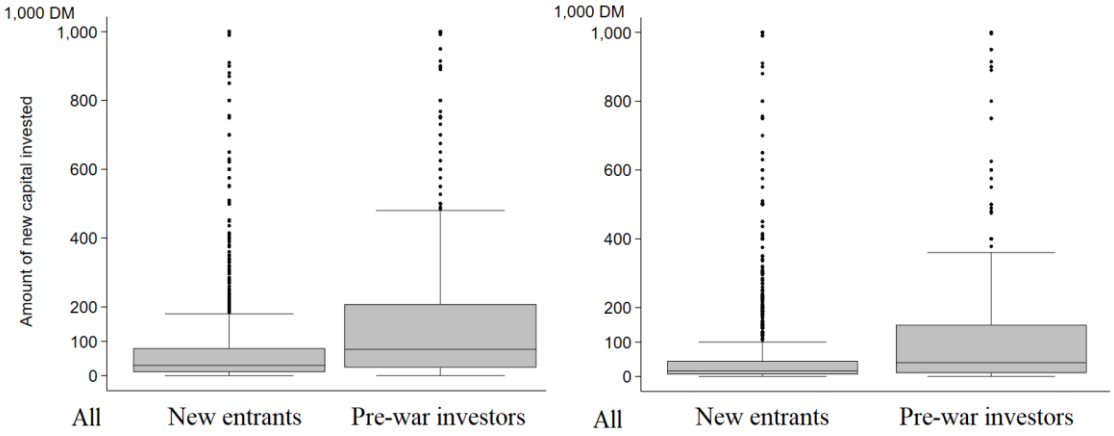
Both equity investment (3rd quarter 1950 - 1st quarter 1955) and lending (3rd quarter 1950 - 4th quarter 1953).



Secondly, an investor count reveals that returnees were much fewer than new entrants. The relation among equity investors is roughly one to ten, while it is hardly less including lending projects. At the same time, pre-war investors were a prominent group. Above all, they invested more. This observation is not driven by few multinationals, even though the latter had typically invested in Germany since before the War. Table 9 shows that median amounts spent by pre-war investors are consistently higher than the 75th quantile of capital invested by new entrants. It also shows that the variation was much lower for the latter group, which contains hardly any investments above 100,000 DM. In contrast, roughly a quarter of their pre-war peers can be found in the medium range of 100,000 DM to a quarter million DM. Not surprisingly, these quantitative differences are largely driven by the fact that a much greater share of new entrants invested in company foundations, which tended to involve only small amounts each. Conversely, the virtual absence of large greenfield investments during the early 1950s represents another early conclusion of the paper.

Table 9: Size distribution of new capital invested, for pre-war investors and new entrants.

a) Equity (3q50-1q55) and lending (3q50-4q53) **b)** Equity only (3q50-1q55)



	All	New entrants	Pre-war investors	All	New entrants	Pre-war investors
Observations:	4,839	4,236	603	2,700	2,401	299
Investors:	3,390	3,084	306	2,186	1,995	191
Destinations:	3,161	2,845	335	1,812	1,622	201
Median:	33,333 DM	30,000 DM	100,000 DM	18,000 DM	16,000 DM	50,000 DM
75th quantile:	100,000 DM	80,000 DM	310,000 DM	50,000 DM	45,000 DM	200,000 DM

Thirdly, investing new capital into Germany was not limited to one-time transactions. On the contrary, Table 10 illustrates that many investors occurred frequently in the Commission records. The table matches a serial number assigned to each investor according to her earliest appearance in the records with the quarters in which she filed any investment applications. The scatter plot would be a step-function along the main diagonal if every investor only ever filed a single application during the entire period. Instead, multiple observations along the vertical line indicate numerous instances of recurring investments. Their determinants warrant more formal examination in the following section, because even though investing repeatedly can be a sign of both success and failure from a purely financial point of view, it is clearly a sign of commitment to the German market. If foreign companies had not seriously attempted to gain or extend their foothold, investing repeatedly would not have made economic sense, however successful the initial project. Taking the table as the basis for a simple applications count reveals also that returnees tended to invest on average slightly earlier than new entrants. Pre-war investors in the data had filed a majority of their applications by March 1953, while it took the others a quarter longer. This narrow difference, however, might be driven by a range of covariates that will need to be controlled for more formally. In addition, Table 10 literally shows the truncation of the data after the 1st quarter of 1955. They reveal information neither on investors entering the market just afterwards, nor on the universe of potential investors that chose not to invest in Germany before that point in time.

Table 10: Equity investments (3q50-1q55) with new capital – Distribution over time.

Finally, proximity to the respective home country seems to be an important determinant for location choice within the Federal Republic, at least as far as investors from neighbouring countries are concerned. In Table 11, this effect is most clearly apparent for the case of the Netherlands, the residents of which hardly invest in South Germany at all, even though the Dutch as a whole represent the third largest investor nation during the period. Investments from Austria, France, Belgium-Luxembourg and Denmark show a similar proximity pattern. The greater dispersion of Swiss projects is due to the role of Switzerland as the most important source for *Sperrmark* loans of the time, which dilutes the more clearly visible pattern for equity investments alone. In fact, the proximity pattern observable in the Commission data for the early 1950s mirrors the findings of the existing historical literature. For the early 19th century, Swiss capital has been credited with developing much of the burgeoning textile industry in the south-western corner of Germany (Mathis 1992, 129). For as recently as the 1980s, Bläsing (1992, 79) observed important proximity patterns for Dutch and Belgian investments. This congruence between the literature and the Commission data is important in two dimensions: On a technical level, it represents a robustness check for the archival data at hand. On a fundamental level, it is indicative of historical continuity that points again to the important role of established foreign investors for post-war FDI. Not only did pre-war investors resume control of their German subsidiaries after the War and furnish them with new capital.

The existing subsidiaries themselves served as important points of reference for new entrants – located as they were relatively close to the border. At the same time, foreign investment was a reality even in regions further away from a border with FDI source countries: 65% of all German districts were home to at least one project involving new capital, even though large cities such as Hamburg, Frankfurt or Cologne were the dominant destinations in absolute numbers.

Table 11: Equity investments (3q50-1q55) and lending (3q50-4q53) with new capital – Source countries.

Source: Shapefile from MPIDR [Max Planck Institute for Demographic Research] and CGG [Chair for Geodesy and Geoinformatics, University of Rostock] 2011: MPIDR Population History GIS Collection (partly based on Bundesamt für Kartographie und Geodäsie 2011) – Rostock.

Technically speaking, the Commission data represent a register of FDI projects for a period of approximately five years. Individual investors and investment targets appear at least once in the data at some point in time during the 19 quarters of observation. They may appear repeatedly over time, either as a pair or on their own with other partners, but neither of them does necessarily. At the same time, the register contains no information on foreign companies or individuals who chose not to invest in Germany before March 1955, but may have done so immediately after the latter date. The data are therefore right-truncated across time. The underlying self-selection of investors into the Commission data raises serious problems with respect to data interpretation. The observation made in Table 9, for example, that pre-war investors typically spend larger amounts than new entrants might not be generalizable to all pre-war investors. Instead, those who do invest during the early 1950s might be distinct from their pre-war peers in some unobservable dimension which both motivated self-selection and led them to invest larger sums than new entrants after 1950. Addressing this issue comprehensively requires detailed, yet unavailable information on the universe of pre-war investors.

Nevertheless, evidence is available at least for the United States of America, the most important source country of FDI during the post-war era (Schmitz-Esser 1969, 10). As part of Trading with the Enemy legislation, the US established a Foreign Funds Control administration in 1940, which took a census of American-owned assets abroad in 1943 (Reeves 1945, 58). All US residents were obliged to report in detail on any type of asset they owned outside the United States by May 31, 1943, even if they had already written them off. The case files of the Foreign Funds Control have survived in the US National Archives[79] and deliver relevant information for the 124 US corporations which owned a subsidiary in Germany by 1943[80]. They allow controlling for US-based holding structures and indirect ownership of German subsidiaries through third country subsidiaries. Among other details, reporters had to provide their total assets, as well as cost estimates for each of their foreign assets. This makes it possible to compute the share of German assets in both total assets and total foreign assets. Both measures are natural indicators for possible self-selection into the Commission data. The more important Germany had been for a particular corporation as a destination country, the more likely it may have been to invest early on post-liberalization.

[79] The records are available in the National Archives in College Park/MD under RG 256: Records of the Foreign Assets Controls, 1941-1996, Entry No. NC 8 – 2, TFR-500: Original Reports Series A II (by Organization) – 1943-1945, Boxes 459-575.

[80] In this particular context, Germany refers to *Deutsches Reich* in its 1937 borders. The Original reports filed by US residents are ordered according to type of reporters, which are corporations, individuals and trustees. The present paper only uses the records pertaining to corporations. The definition of corporations applied by Foreign Funds Control is wide: Besides manufacturing companies, it includes banks, universities, and holding companies.

The reverse could also be true, given the relatively greater exposure to Germany's default and the ensuing war. Similarly, corporations active in more countries may have been readier to take the risk of investing early during the post-war period in the Federal Republic, independently of the financial relevance of their existing German assets. Appendix H provides additional details on the records and the adjustments made to the raw data.

In addition, exploiting the geographical variation of investment projects across German districts allows for estimating the determinants of FDI location choice without problems of truncation. This is especially interesting for the initial location choice made by new post-war entrants, as they were not constrained by prior location choices that pre-war investors had made at some point. Importantly, being able to distinguish new entrants as a group makes it possible to estimate the influence of those prior locations on their own choices. To this end, the distribution of foreign-owned companies across the Federal Republic just prior to the lifting of the investment embargo is available through a publication by the *Deutsches Wirtschaftsinstitut* (1951). The East German institute intended to provide a summary of foreign influence on the West German economy and compiled an extensive list of all West German companies under foreign ownership. The list is based primarily on published business manuals from the late 1930s, such as the "*Handbuch der deutschen Aktiengesellschaften*", the British "*The Bankers Almanac and Year Book*", or the American "*Moody's Industrials*" (Deutsches Wirtschaftsinstitut 1951, 53). Its sole focus on West Germany precludes its use as the universe of pre-war investors in the German Empire. However, it can be used as a geographical variable of interest, approximating the number of foreign-owned enterprises per West German district as of June 1950. To ensure its reliability irrespective of ideology, I only retain the companies for which a precise foreign-ownership share is given, for which the latter exceeds the threshold value of 10%, and which were founded before June 1950. Thus cleaning the data yields a total of 663 companies spread out across 144 districts. The corresponding figure on the local level can be interpreted as a lower benchmark of the overall presence of foreign corporations, as long as the Deutsche Wirtschaftsinstitut (1951) is assumed to have captured at least all foreign-owned companies above a certain quantitative threshold. The data are not, however, employed as higher-dimensional control variables by differentiating them according to countries of origin of the foreign parent company, even though the structure of the data would technically allow for that. The sources used in the publication focus on British and US investors and are thus likely to systematically underestimate the presence of investors from other countries. Further details on the data source and necessary adjustments made to the raw data are contained in Appendix I.

Caveats to data interpretation

Three important qualifications need to be introduced before the Commission data can be used for estimation purposes.

Firstly, meaningful conclusions about FDI at the extensive margin of liberalization require a restriction on the scope of the data used: All estimations presented in the following section other than some Poisson regressions shown in Tables 12 and 13 are based exclusively on investment projects which were funded by new capital and received a permit by the Investment Commission. The restriction to projects funded by either acquired *Sperrmark* or foreign exchange is above all due to the fact that these projects are comprehensively observable in the Commission data, which is not the case for particular types of investments financed with existing capital. As outlined above, the data contain all projects in which the non-resident applicant was directly involved. The investment of new capital obviously required the direct involvement of the non-resident applicant, or at least of a non-resident trustee on her behalf. In the case of reinvesting of existing capital, however, she was only directly involved if she invested out of her own, historic *Sperrmark* accounts, or if she was using liquidity on the balance sheet of her subsidiary that was explicitly due to her, such as *accrued profits due to owner*. In other words, the licencing requirement could be avoided if the subsidiary made investments financed by its own reserves or through German bank loans. Such transactions increased the foreign parent's total investment in the German economy without her immediate financial involvement. They were commonplace at the time, as shown by Wubs (2012, 39) for Dutch multinationals and by Wilkins (1974, 308) for their US counterparts. This peculiar loophole was due to the fact that capital controls were strictly speaking foreign exchange controls. The principle of national treatment allowed foreign subsidiaries to do business essentially just like any other German company, as long as it did not immediately affect financial liabilities to non-residents. Another, more fundamental reason for considering only new capital is the potential ambiguity of reinvesting existing capital. The practice of hedging excess liquidity by investing it in a broad variety of assets during the National Socialist regime has already been described above. Eck (2003, 43) confirms this strategy also for the immediate post-war period for the case of French companies. After all, non-resident owners saw their existing *Sperrmark* wiped out by the currency reform of June 1948 (Dernburg 1955, 23). Even though the legalization of trading in *Sperrmark* in March 1951 introduced effective convertibility, it did so at the prevailing discount with respect to the official exchange rate. Despite the fact that investing in marketable German securities was the more convenient option for hedging purposes, the latter motive cannot be a priori excluded for FDI projects financed with existing capital.

Considering only new capital therefore represents a way to ensure that the observed projects reflected long-term investment motives. For the same reason, I use the approval of applications as a filter against potential bogus applications that I have not been able to identify as such. The following estimations are therefore based only on all projects that were ultimately approved. As a robustness check, however, Appendix A contains identical estimations based on both approved and denied applications.

The second qualification arises from the fact that the early 1950s were a period of pervasive capital controls all over Europe (Obstfeld & Taylor 1997, 26). With few exceptions, prospective foreign investors required the permission not only of the German investment commission, but also of the competent authorities in their respective home countries[81]. Home-country regulation might be an additional source of selection bias, because it worked as an upstream filter, preventing a fraction of potentially serious investment projects from appearing in the German commission data in the first place. This bias would be worse for any particular home country the more discretionary its regulation of outward foreign investment was at the time. Moreover, the impact of home-country regulation on the applications that arrived at the German Investment Commission is essentially unobservable beyond anecdotal evidence. A straightforward way to assess the severity of this bias, however, is to explicitly control for non-control countries in the estimations. Moreover, regulatory pressure at home was frequently evaded: Multinationals were able to invest in Germany via subsidiaries located in third countries with less stringent regulation. Even relatively small companies could make use of a range of intermediaries from Switzerland, a country that had been at the centre of such transactions since the 19th century[82]. British investors offer a case in point. The United Kingdom employed strict capital controls on all transactions outside the Sterling Area (Rollings 2011, 407). Moreover, the Bank of England centralized the allocation of funds for investment in Germany after September 1954, by obliging British residents to offer their *Libka-Mark* holdings for sale to the Bank. Nevertheless, British companies were able to use Swiss trustees and did so repeatedly[83]. Whenever observable in the commission data, I attribute the respective investment projects to the original principal and not the agent from Switzerland or other countries.

[81] As a rule, the few countries with convertible currencies at the time did not control outward FDI. These are notably the United States of America, Switzerland, Canada and Portugal. The United States introduced a mild form of outward capital controls only during the 1960s, in order to alleviate balance of payments pressures (Rollings 2011). The Swiss *Franc* was fully convertible expect for trade payments with fellow EPU member states (Schwerdtel 1992).

[82] Hausman et al. (2007) discuss the late 19th century example of Swiss holding structures for FDI in the electric industry. The special role of Swiss trustees in relation to Germany during the mid-20th century is discussed in detail by Uhlig et al. (2001).

[83] One example in the commission records is given in: BArch B102.6767, 71. Sitzung (5.6.1953), Liste D, Nr. 1.

Finally, a third qualification is a product of the fact that obtaining an investment permit was a one-off requirement, meaning that the eventual implementation, longevity and financial success of submitted investment projects are not systematically observable. Unobserved implementation represents the lesser restriction on data interpretation, inasmuch as the sincerity of the respective project is concerned. Submitting a licence application was costly, as it involved a considerable amount of paperwork. There is also no evidence of speculative hoarding of licences in the data.

Estimation results

The Commission data lend themselves to estimation purposes along three dimensions: Firstly, I identify the groups who invested relatively earlier than others by using Poisson regressions to explain the timing of first investment. Secondly, focussing on investors with more than one project allows interpreting the Commission data as failure time data. I estimate the determinants of recurrent investment correspondingly along the lines of a conditional risk set model proposed by Prentice et al. (1981). Thirdly, I model location choice by new entrants across German districts during the entire period of observation. For this purpose, I employ the McFadden (1974) alternative-specific conditional logit model extensively used in the FDI location choice literature (Nielsen et al. 2017). As discussed already, lending by non-residents to German companies is no longer fully observed in the Commission records after February 1954. I therefore estimate all models separately for two subgroups of the data: One includes all equity investment projects between July 1950 and March 1955 (henceforth called the "long sample"); the other includes all equity investment projects, as well as all lending activity, for the period between July 1950 and December 1953 (henceforth called the "short sample").

A failure-time interpretation is suggested by the structure of the Commission data: At some point during the observational window spanning the period July 1950 to March 1955, individual investors enter observation by filing their first investment application. Once they have entered, they can fail repeatedly, so to speak, by submitting additional projects over time. All investors are censored in March 1955, regardless of whether they have experienced failure since their first application. As a first step, I explain the timing of this first application by a Poisson count data model of the quarter of first application[84]. Table 12 provides the results for the long sample. Column (1) yields the results for the baseline model, confirming the descriptive result of Table 10:

[84] Strict distributional assumptions are one important problem in the context of using Poisson regressions. To control for this, I estimated all regressions presented in Table 12 and Table 13 alternatively using a negative binomial model. The results are equivalent, notably with respect to pre-war investors and German emigrants.

Pre-war investors did invest significantly earlier than new post-war entrants. This result is robust to alternative specifications including a range of further covariates, such as sectoral indicator variables, in Column (2). At the same time, being a German emigrant did not result in significantly earlier investment compared to investors born outside Germany. Equally, family relations between the investor and any person involved with a German destination company do not cause particularly early investment of new capital. The equivalent holds true for foreign trustees. Like family or ethnic relations, trustees are natural candidates for early investors.

Table 12: Timing of first investment: Poisson model, equity investment.

Period	3q50-1q55			
Sample	New capital		New and existing capital	
	(1)	(2)	(3)	(4)
prewar investor	-0.165***	-0.167***	-0.067**	-0.073**
	(0.046)	(0.046)	(0.033)	(0.034)
German origin	-0.057	-0.050	-0.094***	-0.091***
	(0.040)	(0.042)	(0.032)	(0.034)
Family	-0.009	-0.009	-0.011	-0.013
	(0.051)	(0.051)	(0.042)	(0.042)
Trustee	-0.029	0.030	-0.028	0.011
	(0.059)	(0.063)	(0.054)	(0.057)
No control		-0.092***		-0.063**
		(0.035)		(0.032)
WWII neutrals		-0.031		0.004
		(0.047)		(0.042)
Investment size		0.006		0.005
(million DM)		(0.006)		(0.008)
Switzerland		0.006		-0.022
		(0.062)		(0.056)
Sector FE		YES		YES
Constant	2.447***	2.452***	2.415***	2.427***
	(0.013)	(0.031)	(0.013)	(0.028)
Observations	2,059	2,059	2,485	2,485
Wald chi2	15.95	82.87	16.05	67.32
Prob>chi2	0.004	0.000	0.003	0.000

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

In so far as the riskiness of investing in the Federal Republic decreased gradually during the first half of the 1950s, trustees ought to be concentrated during the beginning of the period. The fact that German emigrants were not among the particularly early investors according to models (1) and (2) of Table 12 is contrary to the findings by Burchardi et al. (2018), that ethnic ties play an important role in explaining outward FDI location choice of present-day US investors. However, the type of investment finance considered plays a crucial role in this context. German emigrants were not particularly early investors of new capital, but they were among the earliest, once the reinvestment of existing capital is taken into consideration in models (3) and (4).

Table 13: Timing of first investment: Poisson model, equity investment and lending.

Period	3q50-4q53			
Sample	New capital		New and existing capital	
	(1)	(2)	(3)	(4)
prewar investor	-0.170***	-0.196***	-0.113***	-0.129***
	(0.037)	(0.038)	(0.031)	(0.031)
German origin	0.055*	0.041	-0.061**	-0.074**
	(0.030)	(0.033)	(0.027)	(0.029)
Family	0.012	0.019	0.042	0.042
	(0.027)	(0.028)	(0.026)	(0.027)
Trustee	-0.027	0.015	-0.007	0.023
	(0.041)	(0.044)	(0.040)	(0.042)
No control		-0.040		-0.015
		(0.032)		(0.030)
WWII neutrals		-0.061		-0.002
		(0.042)		(0.039)
Investment size		0.013		0.010
(million DM)		(0.009)		(0.008)
Switzerland		-0.014		-0.059
		(0.054)		(0.051)
Sector FE		YES		YES
Constant	2.099***	2.131***	2.059***	2.091***
	(0.013)	(0.028)	(0.013)	(0.026)
Observations	2,502	2,502	3.065	3.065
Wald chi2	27.77	75.90	22.09	60.35
Prob>chi2	0.000	0.000	0.000	0.000

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

In this sense, the equivalent results to Burchardi et al. (2018) in the context of post-war Germany would be that German emigrants did not invest early because of their ethnicity itself, but because their ethnicity was concomitant with owning disposable German assets which they started reinvesting as soon as this was permissible after the end of the War. However, the results of models (3) and (4) of Table 12 should be viewed with caution. Hedging of liquidity in anticipation of future convertibility is likely to be an important driver of emigrant investments during the early 1950s, especially since a considerable fraction of the corresponding investment money originated with restitution accounts, i.e. accounts owned by victims of the National Socialist regime. Concerning other factors of influence, investors from countries which did not regulate FDI by their nationals invested significantly earlier than investors from exchange control countries. Controlling separately for Swiss investors does not change the results either. Table 13 reproduces the models given in Table 12 for the short sample. In the baseline model (1), German origin is actually associated with belated timing of first investment. This, however, is only significant at the 10% level and vanishes once additional covariates are taken into account. Otherwise, the results are identical with Table 12, except that investors from control-free countries are no longer identified as particularly early investors. Including rejected applications in Tables A1 and A2 in Appendix A does not change the results either. In all cases, the fact that pre-war investors started to invest significantly earlier than new entrants is the most prominent feature of the results.

Not only did pre-war investors start to invest earlier, they also invested on average more often than new entrants. Table 14 yields the results of estimating the determinants of recurrent investment by a conditional risk set model (time from entry) according to Prentice et al. (1981). This model incorporates the possibility of multiple failures per subject into a Cox proportional hazard model. This is done by stratifying the model by the number of repeated failures, which means that the risk set used to calculate the hazard function for each subject at any point in time is composed only of the subjects who have previously experienced the identical number of failures. In the context of this paper, the model thus allows to control explicitly for different frequencies of investment, as the determinants of an additional investment project might change depending on how many previous projects the investor already had. Being a pre-war investor might, for example, have increased the risk of investing a second time, but it might not matter anymore when comparing investors, each of whom had already invested four times over. The results show that pre-war investors are consistently at a higher risk of investing again, so to speak, even when controlling for the previous number of investments. This effect is robust to controlling for previous investment, that is, the amount of money already spent by the investor on projects submitted prior to the application under consideration.

Table 14: Determinants of recurring investments: Conditional risk set model.

Period	3q1950-1q1955		3q1950 - 4q1953	
Sample	Equity investment		Equity investment and lending	
	(1)	(2)	(3)	(4)
Prewar investor	0.683***	0.679***	0.570***	0.501***
	(0.140)	(0.145)	(0.096)	(0.099)
German emigrant	-0.035	0.131	0.132	0.210
	(0.202)	(0.219)	(0.123)	(0.134)
Family	-0.607**	-0.601**	-0.272**	-0.260**
	(0.295)	(0.292)	(0.119)	(0.119)
Trustee	0.202	0.263	0.488***	0.474***
	(0.203)	(0.209)	(0.126)	(0.132)
No control	-0.046	-0.276	0.125	0.051
	(0.132)	(0.220)	(0.097)	(0.136)
WWII neutrals	0.525***	0.327	0.314***	0.226
	(0.134)	(0.220)	(0.095)	(0.172)
Previous investment (million DM)	0.159*	0.164*	0.063***	0.063***
	(0.093)	(0.099)	(0.021)	(0.022)
Nominal capital of destination (million DM)	-0.068*	-0.074*	-0.014	-0.018
	(0.041)	(0.044)	(0.013)	(0.014)
Switzerland		0.390		0.159
		(0.328)		(0.222)
Sector FE		YES		YES
Observations	2,249	2,249	2,971	2,971
Subjects	1,925	1,925	2,319	2,319
Failures	354	354	730	730
Wald chi2	62.66	96.54	134.33	184.17
Prob>chi2	0.000	0.000	0.000	0.000

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Previous investment represents an especially important control, because frequent investments do not necessarily indicate higher overall investments. Spending a particular amount of money once is equivalent to disbursing it incrementally, other things being equal. As a matter of fact, the amount of previous investment has an independently significant effect, increasing the hazard of investing another time. Thus there is a certain degree of autocorrelation in the data: Already having spent considerable sums of new capital on German assets since liberalization makes it more likely to invest again, which is especially true for the short sample in models (3) and (4).

This observation is not driven by the small number of very large multinationals in the data but reflects a general phenomenon. The existing nominal capital of German destination companies actually has a significantly negative effect on investment frequency, at least when considering only equity investments in regressions (1) and (2). Personal relations, on the other hand, do not lead to more frequent projects. German emigrants do not play a significant role, while family relations rarely give rise to repeated transactions, resulting in the significantly negative coefficients of Table 14. As with the timing of the first investment, including rejected applications into the sample in Table A.3 of Appendix A does not change the results in any important dimension.

Autocorrelation in the Commission data points to one of the pitfalls of right truncation. As outlined above, the significance of pre-war investors for post-war investment might simply reflect autocorrelation across the two decades during which Germany had been isolated from international capital markets. Those pre-war investors who self-selected into the post-war Commission data might be the ones who had also historically invested more than other pre-war owners of German assets. If this were true, the fact that the same companies and individuals invested earlier and more frequently than others also after 1950 would not be surprising. This effect would not already be captured by controlling for the nominal capital of the destination company. Controlling for it would require observing the universe of pre-war investors instead. In this paper, I use the universe of corporations from the United States with a pre-war subsidiary in Germany to approximate the larger, yet unavailable, sample. US investors represented the largest national group during the post-war period in the Federal Republic (Schmitz-Esser 1969, 10), which would make historic autocorrelation in their case especially problematic for the purpose of this paper. Table 15 shows that US corporations which appear in the Commission data and already had a German subsidiary before the War are on average not statistically distinguishable from the "holdouts", i.e. those corporations which owned a subsidiary in Germany by 1943, but did not invest in the Federal Republic prior to March 1955. This overall result is robust to including investments made with existing funds. Among all 124 corporations[85], 13% invested new equity capital between July 1950 and March 1955. The ratio increases to 19% if existing funds are included. Both ratios are somewhat higher for the short sample.

[85] The original number of US corporations owning any equity shares within Germany is 221. For estimation purposes, I only use corporations with a subsidiary in Germany, in order to ensure comparability. The original data includes a number of holding companies for mere portfolio investments. I also exclude corporations if their continued existence cannot be verified at least until 1955. Deceased corporations were obviously unable to appear in the Commission data in the first place. Moreover, I merge pure holding structures with their parent companies. The largest corporations typically held a fraction of their German assets by themselves, while pooling the remainder in specialised holding entities. Not controlling for this fact would seriously underestimate the extent of German investments of the parent corporation. Finally, I exclude holding companies administering the German property of Germans or very recent emigrants, as it did not constitute foreign capital at the time of investment. For details, see Appendix H.

Overall, investors and holdouts were very similar regarding the three dimensions considered, and the difference between the groups is hardly ever statistically significant. Only for the short sample are investors on average active in significantly more countries than holdouts, but the sample is prone to outliers given the relatively low number of observations.

Table 15: Post-war investment of US corporations in relation to their multinational activities, as reported in 1943.

Pre-war subsidiary located anywhere in Germany of 1937 (124 US corporations)

	equity investments (3q50-1q55)			equity and lending (3q50-4q53)		
	investors	holdouts	difference	investors	holdouts	difference
existing funds and new capital	23	101		29	95	
number of countries	21.91	18.01	3.90	24.28	17.04	7.23**
German share in non-US assets	0.25	0.27	-0.03	0.27	0.27	-0.00
German share in total assets	0.07	0.06	-0.02	0.04	0.07	-0.02
new capital only	16	108		24	100	
number of countries	19.88	18.57	1.31	24.83	17.27	7.56**
German share in non-US assets	0.22	0.28	-0.06	0.28	0.27	0.02
German share in total assets	0.05	0.06	-0.02	0.05	0.06	-0.01

Pre-war subsidiary located in later West Germany or West Berlin (107 US corporations)

existing funds and new capital	19	88		24	83	
number of countries	20.42	18.10	2.32	23.29	17.13	6.16
German share in non-US assets	0.26	0.27	-0.01	0.28	0.27	0.02
German share in total assets	0.09	0.06	0.03	0.05	0.07	-0.02
new capital only	13	94		20	87	
number of countries	15.85	18.88	-3.04	22.75	17.54	5.21
German share in non-US assets	0.26	0.27	-0.01	0.32	0.26	0.07
German share in total assets	0.06	0.07	-0.01	0.06	0.07	-0.01

Pre-war subsidiary located in later West Germany (76 US corporations)

existing funds and new capital	14	62		19	57	
number of countries	21.86	18.1	3.76	25.11	16.68	8.42*
German share in non-US assets	0.28	0.28	0.00	0.30	0.27	0.03
German share in total assets	0.11	0.06	0.05	0.06	0.07	-0.02
new capital only	8	68		15	61	
number of countries	15.5	19.18	-3.68	24.87	17.3	7.57
German share in non-US assets	0.30	0.28	0.03	0.37	0.26	0.11
German share in total assets	0.08	0.07	0.01	0.07	0.07	0.00

Number of countries refers to the no. of countries for which the US corporation reported any assets.
T-Tests of significant difference in means: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

There is an additional chance that the overall results for all of 1937 Germany in the first panel of Table 15 are distorted by the absence of West Berlin from the Commission Data. Similarly, the corporations were affected differently by Communist expropriation in the Soviet sector and in the formerly German territories east of the Oder-Neisse line. Losing relatively more property might have made corporations relatively more reluctant to invest in West Germany after 1950. At the same time, it might have made them relatively more likely to invest, given the *ceteris paribus* greater need to invest in order to service the German market. The second and third panels of Table 15 therefore reproduce the results according to the different locations of their pre-war subsidiaries. Again, there is no statistical difference between investors and holdouts in the means of the three variables, even when considering only those corporations which had a pre-war subsidiary in later West Germany, excluding West Berlin.

Estimation results so far have shown that pre-war investors played an important role in post-war investment, while the example of US corporations indicates that this role cannot be explained simply as a statistical artefact. By investing relatively early and often just after the lifting of the Allied investment embargo, they were themselves key protagonists in resuming FDI into Germany after the Second World War. The role of established investors, however, went beyond their own contribution to post-war FDI. Their historic presence exerted significant influence on the investment decisions of new entrants. Specifically, it affected the location of the initial investment of new entrants across Germany. In fact, this relationship is a common feature of the FDI location choice literature. An historically important agglomeration of foreigners or foreign-owned companies in a particular locality helps new entrants alleviate the "liability of foreignness" caused by asymmetric information between foreign and domestic investors about the local investment environment (Goerzen et al. 2013). The basic model of the location choice literature is the McFadden (1974) alternative-specific conditional logit model, in which investors maximize their utility across available location choices. Following the specification by Guimaraes et. al (2000, 121) who estimate the model in a similar context, investor i expects to derive the utility level u_{ij} from investing in locality j, where

$$u_{ij} = U_{ij} + \varepsilon_{ij} \qquad (2)$$

and ε_{ij} is an i.i. Weibull-distributed stochastic error term. The deterministic, representative utility U_{ij} is assumed to be a linear function of k explanatory variables of the form

$$U_{ij} = \beta_1 x_{ij}^1 + \beta_2 x_{ij}^2 + \cdots + \beta_k x_{ij}^k \qquad (3)$$

The investor will prefer locality j over any other locality m if

$$u_{ij} > u_{im} \qquad \forall m,\ m \neq j \tag{4}$$

Assuming the independence of irrelevant alternatives, the probability P_{ij} that investor i chooses locality j for her investment takes the form

$$P_{ij} = Prob(u_{ij} > u_{im}) = \frac{\exp(U_{ij})}{\sum_{m=1}^{M \setminus j} \exp(U_{im})} \tag{5}$$

In this paper, the newly arriving investor chooses among 466 German districts[86] given the properties of her investment project and observable district characteristics. Table 16 contains the results. Columns (1) and (4) report the effects of investor-specific variables for the long and short sample respectively. Sectoral agglomeration evidently played an important role in determining location choice, regardless of the type of sample considered. The share of the investing sector in the total district workforce of 1950 has a strongly positive and significant effect on the likelihood of investing in any particular district[87]. At the same time, all the estimations confirm the proximity effect apparent already in Table 11. The distance-to-border variable measures the shortest linear distance between the chosen district within Germany and the border of the respective home country for investors from neighbouring countries, and between that district and the Western border of Germany for investors from anywhere else. Its significant coefficient is always strongly negative as expected. New entrants after July 1950 tended to invest in Germany geographically close to their home, whether directly or indirectly via neighbouring third countries. In addition, investors from the United States, Great Britain and France are more likely to invest in areas of West Germany occupied by their own national government than in those occupied respectively by the two other powers. Table 11 indicates the presence of this effect visually for the case of France. While the location of the French occupation zone within Germany is highly correlated with distance to the French border, it still exerts an independently positive effect on the likelihood of French investors choosing a particular district for investment, potentially mirroring the efforts of the French government to encourage French private FDI into its zone (Eck 2003, 134).

[86] The total number of West German districts was 557 at the time, which comprised both cities that were their own district (*kreisfreie Städte*) and districts containing several municipalities (*Landkreise*). The surrounding rural areas of *kreisfreie Städte* were often organized as their own *Landkreise*. This is a problem for the purpose of estimation, as such *Landkreise* by design have very little economic activity and thus also foreign investment of their own. To address this problem I merge all *kreisfreie Städte* and *Landkreise* for which the administrative seat of the *Landkreis* is the *kreisfreie Stadt*. The total number of districts is thus reduced to 466; For details see Appendix J.

[87] Employment data are taken from the German employment census of September 13, 1950, which was published for each *Land* separately. For details, cf. list of published data sources below.

Finally, in order to make sure that the number of foreign-owned companies on the district level retrieved from Deutsches Wirtschaftsinstitut (1951) really captures an independent effect on the initial location decision of new entrants, I control for a second, and potentially confounding source of information about the local investment environment. The variable 'own consulate' indicates whether a given district hosted any kind of diplomatic representative of the investor home country by early 1951[88]. All else equal, representatives were likely located in cities which had greater economic importance for the respective country, whether close mercantile connections or indeed subsidiaries of domestic companies. Denmark, for example, was the only country represented in Flensburg, while the same holds for the Netherlands in Emden. Taking into account such representation controls for agglomeration *specific* to the respective home country, thus isolating agglomeration effects through the presence of established foreign investors *in general*. The asserted link between consular representation and country-specific agglomeration is corroborated by evidence from the German population census of 1933, which also yields citizenship data by country of origin for 36 larger cities located within later West Germany (excluding West Berlin). Comparing the incidence of a country's official representation in a particular city by early 1951 on the one hand, with the number of its citizens in that city in 1933 on the other hand yields a positive correlation of between 60 and 65%, depending on the measurement used[89]. This high correlation is unlikely to be explained by the representations themselves, assuming that their location had not changed across the period. Foreign embassies with potentially large personnel were located in Berlin in 1933, and the later Western capital city of Bonn is not included among the larger West German cities of the 1930s. In fact, 'own consulate' has a highly significant, positive effect on location choice in both the long and the short sample.

Columns (2) and (3) for the long sample and columns (5) and (6) for the short sample extend the baseline models (1) and (4) to include a range of district-specific variables. Most importantly, the number of established foreign-owned companies exerts a positive and significant influence on the initial location choice of new entrants.

[88] The data on official representatives are taken from Berliner Bank (1951). I do not discriminate between different types of representations, i.e. embassy, consulate, vice consulate, military attaché, commercial attaché, etc.

[89] Statistisches Reichsamt (1936b). The information given in the census publication allows for distinguishing nationals of a particular country according to whether German was their native language. Considering all foreign nationals regardless of their mother tongue results in a coefficient of correlation with 1951 representation of 60.77%. Restricting the sample to foreign nationals who have a native language other than German, except for nationals of the (partly) German-speaking countries Austria, Luxembourg and Switzerland, raises the coefficient to 61.06%. Yugoslavia is an extreme outlier, as its 1951 representation across Germany is virtually uncorrelated with the distribution of Yugoslavs across Germany in 1933. Taking Yugoslavia out of the sample increases the coefficient to 64.02% (all foreign nationals), and 65.33% respectively (non-German native speakers, including all Austrians, Luxembourgers and Swiss). In the above, I only consider countries that were potential home countries of investment during the 1950s. Thus, for example, I exclude the Soviet Union or Poland, even though corresponding data in both sources exist.

All else equal, the latter tended to concentrate in areas in which there had been many foreign subsidiaries since before the War. Observing such an effect, however, could be due to spurious correlation resulting from a range of potentially omitted variables. Thus, the positive effect might be explained by the persistent industrial geography of Germany.

Table 16: First location choice of new entrants: Alternative-specific conditional logit model.

Period	3q1950 - 1q1955			3q1950 - 4q1953		
Investment sample	Equity investment			Equity investment and lending		
	(1)	(2)	(3)	(4)	(5)	(6)
Sectoral employment share	7.341***	7.795***	7.883***	7.082***	7.652***	7.750***
	(0.585)	(0.330)	(0.335)	(0.500)	(0.305)	(0.308)
Distance to border	-6.491***	-7.617***	-7.607***	-5.298***	-6.453***	-6.438***
	(0.323)	(0.314)	(0.315)	(0.261)	(0.243)	(0.244)
Own occupation zone	0.603***	0.640***	0.634***	0.745***	0.916***	0.904***
	(0.099)	(0.104)	(0.103)	(0.091)	(0.093)	(0.093)
Own consulate	0.517***	1.455***	1.510***	0.380***	1.089***	1.154***
	(0.110)	(0.131)	(0.132)	(0.106)	(0.111)	(0.115)
Foreign-owned companies		0.014***	0.014***		0.011***	0.011***
		(0.003)	(0.003)		(0.002)	(0.002)
P.c. retail turnover 1950		0.314***			0.390***	
		(0.072)			(0.051)	
P.c. industry turnover 1935			0.017			0.027
			(0.037)			(0.034)
Population density 1950		0.0003***	0.0003***		0.0003***	0.0003***
		(0.000)	(0.000)		(0.000)	(0.000)
Large city 1950 (>500,000)		1.450***	1.519***		1.612***	1.692***
		(0.153)	(0.153)		(0.126)	(0.126)
Seaport		-0.110	-0.150		0.339**	0.312*
		(0.248)	(0.255)		(0.172)	(0.176)
Rhine		0.782***	0.831***		0.593***	0.645***
		(0.078)	(0.083)		(0.069)	(0.0724)
Hamburg-Frankfurt		1.048***	1.093***		0.856***	0.922***
		(0.139)	(0.149)		(0.125)	(0.134)
District FE	YES			YES		
Observations	874,216	874,216	874,216	1,046,170	1,046,170	1,046,170
Wald chi2	640.62	10,849.58	10,639.24	700.79	12,179.4	11,963.14
Prob > chi2	0.000	0.000	0.000	0.000	0.000	0.000

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

If foreign corporations had invested in traditional industrial centres of Germany before the First World War and during the interwar era, they might have done so also after 1950. I measure established centres of industry by per capita industrial turnover in 1935. The data are taken from official turnover tax statistics for that year[90]. However, 1935 industrial turnover has no significant effect of its own in models (3) and (6) respectively, while the coefficient for foreign-owned companies is unaffected. Retail turnover figures for 1950 provide an alternative measure for local economic activity. In fact, they are extremely highly correlated with district-level GDP in 1957, which represent the earliest available data for local GDP in West Germany[91]. Replacing 1935 industrial turnover with 1950 retail turnover in models (2) and (5) does not change the positive significance of foreign-owned companies, while retail turnover does have a significant positive effect of its own. Population density serves a proxy for urban agglomeration, reflecting the fact that investment projects tended to be concentrated in urban centres[92]. In addition, I control specifically for the largest cities of the time, each of which were also popular investment destination. Both variables are always significant, as is controlling for Hamburg and Frankfurt, the two single most important investment destinations, separately. Finally, two important features of Germany's economic geography in the form of seaports[93] and districts located on the Rhine are included. While a location on the Rhine has the expected positive and significant influence on location choice, being a seaport does not, which could be due to the fact that the two most important ports as well as investment destinations, Hamburg and Bremen, are already captured by other variables. As with the previous estimations, including rejected applications in Table A.4 of Appendix A does not affect the results in any significant way.

[90] Statistisches Reichsamt (1939). Per capita industrial turnover refers to district population figures of 1933, which are provided in the same publication. Employing 1935 data on the district level requires prior adjustments for changes in district boundaries between 1935 and 1950. I base adjustments on population shares of 1950 districts in 1935 districts, taking population data on the municipality level from the population census of 1933, provided in Statistisches Reichsamt (1936a). For details on the adjustments made, see Appendix J.2.

[91] 1950 turnover data are taken from Statistisches Bundesamt (1955), 1957 GDP data from Gemeinschafts-veröffentlichung der Statistischen Landesämter (1964). The correlation between the two series amounts to 0.9793.

[92] Population data for 1950 are taken from Statistisches Bundesamt (1955).

[93] The indicator variable 'seaport' takes the value 1 for all districts in which a seaport is located that is listed separately as a port in the seaport cargo handling statistics of 1952 (StJB 1952, 297). These are: Lübeck, Kiel, Flensburg, Hamburg, Cuxhaven, Bremen (Bremen and Bremerhaven), Wesermarsch (Brake and Nordenham), Emden.

Conclusion

This paper studies very early FDI into the Federal Republic of Germany during the initial years following the lifting of the Allied investment embargo in June 1950. It draws on a unique archival data set containing the universe of equity investment projects directly involving a foreign investor between July 1950 and March 1955, and the corresponding universe of lending projects until the end of 1953. In addition, previously unexplored evidence on US corporations with pre-war subsidiaries in Germany is used as a robustness check against concerns arising from right-truncation in the post-war data. At a time when foreign investment remained highly regulated all over Europe and international capital markets were virtually non-existent, interested foreign investors were already able to spend additional amounts of their outside capital on long-term assets within Germany. The lifting of the Allied embargo therefore lies at the extensive margin of financial liberalisation for all of Europe after the end of the Second World War.

After almost two decades of isolation from international capital markets, FDI into Germany was resumed prominently by companies and individuals who had already owned a stake in the country before the War. Pre-war investors invested new foreign capital significantly earlier and more frequently than new entrants, even though they should have been less likely to inject new capital into their German activities, as other, less regulated alternatives were available to them. Evidence for US investors suggests that these findings are also not driven simply by historical autocorrelation. Furthermore, returning investors were important after 1950 not only by themselves. Their established presence across German districts exerted significant influence on the initial location decision of investments by new post-war entrants. The paper thus reveals several dimensions of high persistence in patterns of foreign investment activity across time.

CHAPTER III – The London Debt Agreement of 1953 and foreign investment into West Germany

The 1953 London Agreement on Germany's outstanding foreign obligations has been frequently highlighted as a major contribution to the strong performance of the West German economy during the 'miracle years' of the 1950s and 1960s. However, there has been little empirical research so far on the Agreement's actual, contemporaneous impact. It is commonly asserted that the Agreement restored Germany's creditworthiness abroad. I test this assertion by investigating the link between outstanding pre-war foreign debt, the London Agreement and foreign investment into West Germany during the first half of the 1950s. The conclusion of the Agreement in itself was not sufficient to restore confidence abroad, while it represented a necessary precondition for the gradual removal of exchange controls, which in turn had a strong positive impact on investor expectations. On the other hand, the residual importance of outstanding pre-war debt for post-war investment twenty years after the default of the 1930s must not be overestimated: The presence of pre-war debt, as well as its settlement in the London Agreement did not determine investment patterns on the local level in the early Federal Republic. More fundamental economic factors clearly took precedence over Germany's painful default history.

Introduction

In a 1986 contribution to a volume on West Germany's[94] early post-war history, Christoph Buchheim remarked the curious absence of any scholarly literature on the London Debt Agreement of 1953, which corresponded in his opinion to the lack of public interest in the topic (Buchheim 1986, 222). The same can certainly no longer be said thirty years later. In the wake of the sovereign debt crises of the early 1990s, and again during the European debt crisis after 2008 the history of Germany's default and its settlement has attracted considerable attention, both in the literature and more broadly in public opinion. The historical irony seems striking: The proponent of austerity within the Eurozone prevents Greece and other indebted countries from benefiting from as favourable a treatment as Germany had itself received after the Second World War.

[94] In this paper I will use the terms West Germany, the Federal Republic and Germany interchangeably. East Germany, that is, the Soviet Zone of Occupation and later the German Democratic Republic, is irrelevant for the purpose of this paper.

As a matter of fact, the London Agreement did involve a substantial reduction of Germany's outstanding foreign liabilities: The three Western Allied governments renounced on the repayment of about 57% of their post-war aid to their zones of occupation, while pre-war liabilities were reduced by some 40% (Guinnane 2015, 16). Moreover, it effectively precluded future reparation demands against the Federal Republic, as any claims arising from the Second World War were expressly excluded and made secondary to the fulfilment of the Agreement (Buxbaum 2005). Under this condition Germany was also able to avoid repaying most of its substantial clearing debt which it had amassed during the War with respect to neutral and occupied European countries (Berger & Ritschl 1995, 495). The literature typically mentions two broad classes of benefits for the German economy from such favourable treatment: Firstly, the Agreement removed the contingency of unsustainably large debt repayments from the German sovereign and private debtors, thereby stabilizing public finances and freeing up resources for productive internal uses. Secondly, it restored German creditworthiness abroad, facilitating the country's reintegration with international trade and finance.

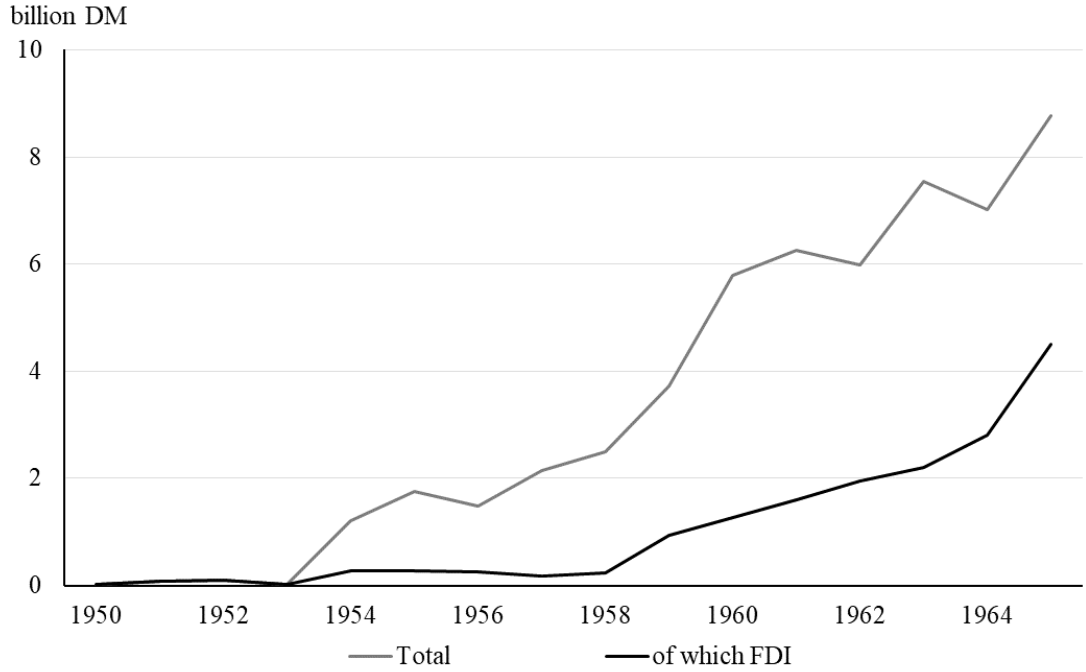
While the political process of the negotiations and the financial terms of the settlement have already received considerable attention in the literature, there is as yet very little empirical research trying to test these hypothesised benefits. After its ratification in 1953, the London Agreement had been implemented smoothly, and its implementation coincided with more than a decade of spectacular economic growth during which Germany did reintegrate quickly with the world economy[95]. This overall success story both allows for generous assertions about the Agreement's benign effects and at the same time makes it hard to empirically test these effects in existing macroeconomic data. A null hypothesis of 'any positive effects' can hardly be rejected. Conversely, any attempt to quantify the effects depends crucially on the choice of historical counterfactual: The importance of concluding the London Agreement increases in the assumed fallout from a hypothetical failure to settle Germany's pre-war default. Choosing such counterfactual for an issue of international economic diplomacy, however, is a delicate matter of plausibility for a period of dramatic international confrontation like the early 1950s. On a more practical level, the first half of the 1950s was a period of rapid innovations in West German economic policy and a variety of simultaneous international developments are prone to obscure the Agreement's 'treatment effect' on economic or fiscal aggregates.

[95] Between 1950 and 1955 average annual GDP growth amounted to more than 9% (Ritschl and Spoerer 1997, 53) and unemployment halved from 10,4% in 1950 to 5,2% in 1955 (Sachverständigenrat 1995, p.369). Industrial production almost doubled (Bank deutscher Länder, monthly report for September 1956, p. 94) and total exports of goods more than tripled during the period, with the 1955 surplus on the balance of trade amounting to 5% of the value of exports (Bank deutscher Länder, monthly report for February 1956, p.82). High growth rates continued until the mid-1960s. Buchheim (1990) provides a comprehensive account of Germany's post-war integration.

Specifically with respect to Germany's creditworthiness abroad, the naked fact that international capital flows into the Federal Republic did resurge after 1953 naturally vindicates the positive role of the Debt Agreement. This observation, however, raises three questions: Does correlation mean causation? If it does, is the Agreement itself a sufficient, or 'merely' a necessary condition for restoring Germany's financial reputation? Finally, which type of obstacle to creditworthiness does the Agreement remove? Does outstanding pre-war debt represent a solvency risk for the individual German debtor, whether she be a public jurisdiction or a private company? Or does it represent a currency risk, which materialized as a convertibility problem in the era of fixed exchange rates and inconvertible currencies of the 1940s and 1950s? Contemporaneously referred to as the 'transfer' problem, the latter would be exogenous to the individual debtor, and should therefore not have affected her private creditworthiness differently from any debt-free entity within the Federal Republic.

In order to address these questions from an empirical angle it would be necessary to observe international capital flows to Germany both before and after the conclusion of the London Agreement in February 1953. However, Table 17 shows that on the aggregate level, there was virtually no new foreign investment into the country before 1953. This observation would preclude any further discussion, were it not for a peculiar feature of German capital controls of the time that allows for observing the cross-sectional dimension of foreign investment, thus going beyond the discussion of low-frequency time series data. Blocked non-resident DM accounts with German banks (commonly known as *Sperrmark* until September 1954 when they were renamed into *Libka-Mark*) could be re-invested into a broad range of German assets after the lifting of the Allied investment embargo in June 1950. In addition, *Sperrmark* became indirectly convertible in March 1951 as they became legally tradable outside Germany. Two features make them particularly interesting in the context of this paper: Through their free exchange among potential investors outside Germany, the individual investor was able to commit additional amounts of her capital to the German economy, even though this resulted in no additional inflow of foreign capital on the level of Germany's balance of payments. Moreover, reinvesting these balances directly into German companies, as opposed to mere portfolio investment on German stock exchanges, required an individual permit by a German government body. This makes it possible to observe virtually the entire universe of firm-level Foreign Direct Investment into German equity capital between June 1950 and March 1955, and the corresponding universe of foreign lending to German companies for a shorter period until the end of 1953. As a result, the observational window thus stretches the period during which the London Debt Agreement was negotiated, concluded and when its implementation began.

Table 17: Long-term gross private foreign investment inflow into Germany, 1950-1965.



Source: Buchheim (1986), p. 227, original source: Deutsche Bundesbank (1976). Deutsches Geld- und Bankwesen in Zahlen 1876-1975, Fritz Knapp Verlag, p. 343.

Even though Table 17, which includes *Sperrmark* investments, shows that the latter did not involve quantitatively large amounts of capital, the cross-sectional dimension of the data derived from the official licencing procedure provides a way to nevertheless estimate the effect of the London Agreement on foreign investment. The contribution of this paper is thus based on exploiting a rich archival data set, both of daily *Sperrmark* prices on international markets, and of the firm-level population of the first five years of foreign direct investment projects into Germany after the War. These post-war data are complemented by information on the amount of pre-war foreign debt on the level of German districts that was still outstanding by September 1950. The empirical part of the paper is structured accordingly: A structural break estimation of the daily *Sperrmark* and *Libka-Mark* prices is followed by a difference-in-differences model on the level of German districts that uses the incidence of pre-war debt on the district level to define treatment and control groups. The two preceding sections will discuss the existing literature on the London Debt Agreement, and provide an introduction to German capital controls of the early 1950s.

The London Debt Agreement and the post-war German economy

The political history of the London Debt Agreement is described in authoritative detail by Rombeck-Jaschinski (2005). On the economic side, Guinnane (2015) provides a comprehensive discussion of its financial provisions and its broader context, both as a sequel to the Versailles Treaty and a product of incipient Cold War confrontation.

The third major contribution has been written by Hermann Josef Abs, himself the leader of the German delegation at the debt negotiations, and provides an interesting autobiographical perspective on the negotiations leading up to the London Agreement (Abs 1991). How best to deal with Germany's outstanding obligations had been a constant subject of debate among Allied governments since the late stages of the War. The necessity to sustain the German population through Allied aid programmes during the years immediately following Germany's defeat added substantial sums to this bill. So did the US decision to organize the European Recovery Program in the form of loans rather than grants with respect to the three Western zones of occupation in Germany (Hardach 1994, 120). More than a year after the establishment of the new Federal Republic of Germany, the Allied High Commission formally requested on October 23, 1950, that the new government recognize all outstanding pre-war foreign debt, as well as the obligation to reimburse the Allies for post-war assistance. An explicit link was established between such recognition and any further transfer of sovereignty to the Federal Republic. After months of debate the Adenauer government finally acceded to Allied demands on March 6, 1951. The ensuing debt negotiations progressed in several stages and concluded on August 8, 1952, at which point the final report of the London Debt Conference already contained the gist of the later Agreement. The latter was finally signed on February 27, 1953, ratified by Germany and all three Allied powers until July 13, and entered into force on September 16, 1953. Three related sets of Agreements were struck simultaneously to the main negotiations in London: On the side lines of the main Conference, the German Credit Agreement of June 11, 1952, resolved the longstanding issue of standstill debt. These were nominally short-term credit lines maintained since September 1931 by foreign banks in order to prevent the collapse of German foreign trade following the 1931 financial crisis. The German Credit Agreement, however, was to be part of the larger Debt Agreement and could therefore not enter into force before the latter (Rombeck-Jaschinski 2005, 340). In addition, Germany concluded a series of Agreements with Switzerland on August 28, 1952. In contrast to other European governments, the Swiss government insisted successfully on the repayment of the 'Clearing billion', the substantial clearing debt that Germany had accumulated with Switzerland between 1934 and 1945. With Allied consent German pre-war assets in Switzerland were unblocked in return (von Castelmur 1992). Most important from a political and financial point of view, however, was the Luxembourg Agreement with Israel and the Jewish Claims Conference of September 10, 1952. Highly controversial at the time among German decision makers, the Federal Republic agreed to pay about 3.5 billion DM over a period of 14 years (Goschler 2005, 172). Abs was an early critic of the negotiations with Israel, as he feared that large payments under the Luxembourg Agreement would undermine his negotiating stance in London (Gall 2006, 176).

On a macro-economic level particular relevance has been attributed to the amortisation schedule agreed upon in the London Agreement: Debt service was to be limited to Germany's regular capacity to transfer repayment annuities in foreign exchange, that is, to its export surplus (Guinnane 2015, 20). The overarching aim was to prevent harsh settlement terms from endangering the financial health of the German economy and its public budgets. The treaty establishing a European Defence Community had been signed in May 1952 and was awaiting ratification by national parliaments[96]. West Germany had to co-finance the Allied occupation, as well as the stationing of Western troops across its territory (Zimmermann 2004). The Federal Republic was thus expected to make large contributions to Western defence in the imminent future. This, rather than debt repayment, was the top priority, especially for the United States government (Rombeck-Jaschinski 2005, 210). Accordingly, Article 5 of the London Agreement shelved all War-related claims, including reparations against Germany until after a future reunification of the country (Buxbaum 2005). Even though the Agreement did not involve any reduction of the principal of pre-war debt, no compound interest was charged for the period between default and settlement. The originally prevalent gold clauses on pre-war bonded debt were substituted by a US-$ clause, which implied an important haircut for German debtors (Guinnane 2014, 90)[97]. Moreover, a certain range of payment obligations were also postponed until after German reunification[98]. The resulting reduction in the total debt burden is difficult to pin down exactly, because the total sum of outstanding debt in the first place requires choices of interest and exchange rates that are not straightforward. It becomes even more difficult if potential reparations and other War-related claims are to be included. It seems reasonable therefore to argue with Guinnane (2015, 17) that Germany was required "to pay at the very most half of what she owed". The subsequent repayment annuities were fixed at 567 million DM (135 million US-$) per year for the first five years, and at 765 million DM (182 million US-$) per year thereafter.

Because of its large haircut the London Agreement has been frequently cited as a model for the solution of sovereign debt crises during the 1990s and today, for example by Kaiser (2013) or Sachs (2015). Guinnane (2015, 25ff) and recently Rombeck-Jaschinski (2017, 520ff) have discussed these comparisons convincingly as often misleading and ahistorical. For the purpose of the present paper, they are interesting in as much as they imply a distinct type of impact of the London Agreement.

[96] Ratification eventually failed on August 30, 1954. Noack (1977) gives a detailed account of the ratification crisis. After the failure of the European Defence Community Germany was admitted to NATO instead during 1955.
[97] Gold clauses were substituted by a Swiss *Franc* clause for debt denominated in Swiss *Francs*, respectively.
[98] Glasemann (1993, 43-52) provides a detailed description of these deferred types of debt.

The leniency of creditors with respect to the defaulting debtor country gave Germany a "fresh start" (Sachs 2015) not only on international capital markets, but also with respect to its public finances. Full debt service would have condemned the young Federal Republic to years of austerity with the resulting political and social unrest. Conversely, the Agreement as concluded removed the contingency of this large financial burden from the German fiscal state, freeing up resources for more productive internal uses. Recently, Galofré-Vilà et al. (2019) comprehensively discuss the "economic consequences" of the Debt Agreement and perform an empirical test of this particular channel of influence. They find a strong positive effect of the London Agreement on public expenditure through its effect on social spending. Specifically, they propose a difference-in-differences model to test this connection, in which social spending is defined as the treatment group and all other categories as the control group. The observed differential increase of social spending over other categories of spending in aggregated public expenditure data after 1953 is thus attributed to the increased 'fiscal space' of the German state implicit in the terms of the Agreement. Their choice of empirical strategy, however, is problematic as the debt settlement itself treats all categories of spending in an identical way. By their choice of control group they assume implicitly that the contingency of 'austerity' was removed exclusively from social spending, while it remained on all other categories. This is true regardless of the spending priorities of the German government. On a more fundamental level, the fiscal channel of influence requires a counterfactual scenario in which the Federal Republic either would have been forced to service its debt in terms of a much harsher Agreement, or would have been paralyzed permanently by financial uncertainty in case of no Agreement. To assess the likelihood of such scenarios is inherently a matter of speculation, but it runs counter to the above discussion about contemporaries' understanding of West Germany's importance during the incipient Cold War. On an empirical level there is also no compelling identification strategy for the Agreement's impact on fiscal aggregates, which are only available in yearly intervals.

Hermann Josef Abs himself, a central figure in German private banking since the 1930s, saw the purpose of the settlement of outstanding foreign debt primarily in restoring German creditworthiness abroad[99]. Abs' notion of creditworthiness was not only financial but also moral. Concluding the Debt Agreement was meant to show to the world that Germany could be trusted again as a people (Abs 1991, ix).

[99] In fact, one of the earliest historical publications on the London Debt Agreement was the transcript of a lecture Abs gave in April 1980. The publication was entitled "The restoration of German credit" (Schwarz 1982). It also featured the transcript of a lecture Abs had given in September 1949, in which he pleaded for the settlement of outstanding foreign debt already at a time when this would still seem illusory to most observers (Schwarz 1982, 80).

The economic effects of moral rehabilitation are impossible to measure, but such considerations should be noted as an important motive on the German side[100]. In financial terms, a comprehensive debt settlement was meant to overcome Germany's long isolation from international capital markets that had begun in 1930 (Guinnane 2014, 76) when the ratification of the Young Plan dried up the inflow of foreign capital to the Weimar Republic and eventually led to severe waves of capital flight (Ritschl 2012, 13). Ending isolation meant attracting fresh foreign capital to the German economy, in the form of both long-term investment capital and short-term commercial credit. Creditworthiness was an important aim in itself, but it was also seen by Abs as an essential precondition for full DM convertibility (Schwarz 1982, 36). Full convertibility implied lifting exchange controls to an extent that foreign creditors were able to freely convert their DM assets into their home currencies without quantitative limits. In the absence of an anterior Debt Agreement, full convertibility would have led to instantaneous mass conversion of liquid foreign assets, which in turn would have put an unsustainable strain on Germany's foreign exchange reserves, quickly upending the move towards convertibility (Buchheim 1986, 224).

The absence of private commercial credit for Germany's foreign trade through international banking connections was in fact an important policy concern for the *Bank deutscher Länder* during the early 1950s (Dickhaus 1996, 112). In practical terms, German importers would not be granted otherwise customary terms of credit by their foreign suppliers, while German exporters would not receive down payments by their foreign clients. Pohl (1973, 137) cites the example of German shipbuilders which would get paid only after delivery to their US clients, as any accounts payable to German companies risked being attached in the US by pre-war creditors (Schwarz 1982, 56). Abs also mentions large multinationals which would only supply raw materials to the German market if additional payment guarantees or advance payments had been furnished (Schwarz 1982, 40). These circumstances made imports more expensive and exports less competitive than would otherwise have been the case. They should also have made it harder for Germany to accumulate foreign exchange reserves: Imported inputs for export production were payable immediately in foreign exchange, while the resulting export revenue would only accrue once the product was delivered abroad – in the case of ships possibly several years after costs had been incurred by the German producer. "The lack of an adequate source of credit on commercial terms" has indeed been cited as a major reason for Germany's critical balance of payments crisis during the winter of 1950/51 (Giersch et al. 1992, 105).

[100] For German Chancellor Adenauer, political considerations clearly took precedence over narrow financial concerns, to the dismay of his Finance Minister Fritz Schäffer. This becomes especially clear in the context of the negotiations with Israel (Gall 2006, 180).

Fast import growth and lacklustre export performance during the first few weeks of 1951 forced the Federal government in late February to suspend trade liberalisation and reintroduce quantitative controls on all imports from OEEC countries for the remainder of the year[101]. The implication of this argument is that once the London Debt Agreement had been concluded successfully, German foreign trade should have grown more quickly, and exchange reserves of the Central Bank should have accumulated faster than before, due to restored access to international commercial credit. Indeed, Scholtyseck (2013, 346) claims exactly that. At the same time, however, he notes a variety of simultaneous developments that could equally well explain Germany's strong trade growth: investment-friendly taxation laws that stimulated internal financing of companies; political integration with Western Europe; and joining the International Monetary Fund and the World Bank in August 1952. One could also add joining GATT in October 1951, as Grünbacher (2004, 216) does in his account of the benefits of the London Debt Agreement[102]. Moreover, the Korean Armistice was signed on July 27, 1953, that is, five months after the conclusion of the Debt Agreement and less than two months before its entry into force. This list of events again exemplifies the difficulty of clearly identifying the effect of the Agreement in low-frequency time series aggregates such as foreign trade, public expenditure or GDP. More specifically on the issue of commercial credit, Temin (1995, 749) notes that the German import boom following the start of the Korean War affected all categories of imports equally. In fact, during the four weeks prior to the suspension of import liberalization, about two-thirds of outstanding import licenses in liberalized sectors were for textiles, leather products, coffee and tobacco[103]. These goods were hardly inputs into export production. This is not to say that the absence of private, international sources of trade finance prior to the Debt Agreement had not been costly to the German economy. It calls into question, however, the size of its negative impact on the country's foreign trade, which might be overestimated by a literature dealing with the London Debt Agreement as an important event in German post-war history.

Outstanding debt, especially short-term standstill liabilities, were undoubtedly a real obstacle to new commercial credit. Private banks in the U.S. and Great Britain made debt settlement a precondition for normalized relations with their German counterparts (Horstmann 1991, 197). Especially British banks had made painful experiences with these pre-war credit facilities during Germany's default (Forbes 2000, 166ff).

[101] The German balance of payments crisis of 1950/51 has frequently been mentioned in the literature on the European Payments Union, such as in Kaplan and Schleiminger (1989). Hentschel (1989) provides a concise chronology of the crisis, stressing the positive role of the EPU in crisis solution.
[102] Jerchow (1979) provides an historical account of the negotiation process leading up to Germany's GATT accession.
[103] See German Federal Ministry for the Marshall Plan, BArch B146.479, document dated February 19, 1951.

Then again, this does not mean that debt settlement alone was sufficient for normalizing short-term credit relations with West Germany. German Central Bank officials met with representatives of private British banks during negotiations in London over the Federal Republic joining the Transferable Sterling Account Area (TAA) in February 1951[104]. Opening up commercial credit lines was an important motivation of the Central Bank in considering to join the TAA. At the meeting the German side was expressly told that the British Banker's Association had decided its members should not finance German imports for the following reasons: "1.) unpublished bank balance sheets; 2.) unresolved standstill question; 3.) - and this is the main reason *[sic!]* – the risk of War on the territory of the Federal Republic"[105].

On the empirical side, the *Bank deutscher Länder* started collecting end-of-month data for the level of short-term, foreign commercial credit lines of German banks in November 1953[106]. For the following two years these credit lines grew in size both absolutely and relatively, from about 4 percent to about 20 percent of the value of total monthly imports into Germany by early 1956 (cf. Appendix B, Table B.1). Their fast growth after late 1953 constitutes factual evidence that the Debt Agreement did indeed restore Germany's financial ties abroad in an important dimension. Yet how necessary were these renewed credit lines for Germany's foreign trade performance at the time? Table B.2 in the Appendix shows the ratio of the currency reserves of the *Bank deutscher Länder* and the value of total monthly imports into Germany, i.e. it shows how many months of imports could be financed during any given month by existing currency reserves between 1951 and 1955. The ratio of total reserves to imports increases sharply after March 1952. Technically this is due to a prolonged decline in the value of imports overall and also more narrowly from within the OEEC area, while the value of exports continued to grow steadily. The ratio subsequently levels off at the beginning of 1954, which in turn is due to imports, and this time their prolonged increase. The value of both total imports into Germany and imports from OEEC countries grew by almost half in the two years after November 1953, which amounted to a considerable acceleration compared to the two previous years.

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[104] HABB B330.39.2, Prot. der 86. und 87. Sitzung des Zentralbankrats am 24.2., 28.2, und 1.3.1951, Angebot der Treasury bzw. der Bank of England an die Bundesrepublik auf Eintritt in die "Transferable Pfund-Sterling Account Area" und das Ergebnis der dieserhalb in London vom 12. – 17.12.1951 geführten Besprechungen, 23.2.1951.

[105] *ibidem*, p. 8: "Besprechungen bei der Midland Bank, Overseas Branch, Barclays Bank, Chief Foreign Branch, Kleinwort, Sons & Co., Guinness, Mahon & Co. ergaben, dass eine Anordnung der Bank of England, Import-Kredite an deutsche Banken oder Importeure abzulehnen, nicht besteht. Die Bankers' Association hat aber beschlossen, solche Kredite an Westdeutschland nicht zu geben aus folgenden Gründen: 1.) Nicht veröffentliche Bankbilanzen, 2.) ungelöste Stillhalte-Frage, 3.) – und das ist der Hauptgrund – das Kriegsrisiko für das Bundesgebiet."

[106] Monthly tables on '*von deutschen Banken im Ausland in Anspruch genommene Rembourskredite*' were attached the Minutes of the Central Bank Council and can be accessed at the *Bundesbank* Archives, starting with the 174th meeting of the Central Bank Council on August 11, 1954; see HABB B330.79.1.

Conversely, currency reserves in absolute values show steady growth across these four years, with no apparent turning point around the end of 1953. There is thus suggestive evidence that private international trade finance indeed benefited German foreign trade, specifically by allowing for a faster growth of imports. Exports and thus export revenue on the other hand were not affected by this change in any readily apparent way.

With respect to long-term investment capital, its lack for the German economy constitutes one of the enduring themes of economic policy debates in Germany during the late 1940s and the 1950s (Giersch et al 1992, 48). Private capital markets were highly regulated in order to channel renewed savings after the currency reform towards financing large-scale, heavily subsidized public housing programmes. Beckers (2014) provides an excellent account of the successive investment laws which exerted a dominating influence on capital markets during the 1950s. He describes the basic tension between the supply side of private savings that were considered inadequate on the one hand and the political pressure to keep interest rates low in order to provide cheap financing for reconstruction programmes on the other hand. Under these circumstances attracting new long-term foreign capital to the German economy was frequently proposed as an essential solution (Dickhaus 1996, 146). There was, however, consensus that new foreign capital would not be forthcoming before the outstanding debt had not been settled in a satisfactory way for pre-war creditors (Abs 1991, 54). For Hermann Josef Abs, the connection between attracting new foreign capital and settling old debts was immediate, as he said during a lecture in September 1949 that "the creditors of yesterday are the potential creditors of tomorrow" (Schwarz 1982, 90). Accordingly, attracting new foreign investment into Germany has often been cited as one of the main benefits of the London Debt Agreement, for example by Buchheim (1986, 227), Grünbacher (2004, 216) or Guinnane (2014, 91)[107]. Indeed, as Table 17 has shown, private foreign investment did resume after 1953. While the resumption was largely confined to portfolio investment until 1958, foreign direct investment picked up thereafter, too. On the face of it this evidence leaves little doubt that attracting new foreign capital was one important benefit of the London Debt Agreement, which in turn helped ease the shortage of investment capital in the German economy.

At this point it is worthwhile, however, to take a closer look and make two observations that have already been made by Buchheim (1986, 227/8) when discussing these data: Firstly, 1954 was not only the first post-Agreement year, but it was also the year during which current returns on foreign investment had been made convertible again.

[107] Grünbacher (2004, 83) even credits the Agreement with returning financial markets in Germany to "normal", even though he does not specify the exact meaning of this characteristic.

It is not a priori clear whether the higher investment figures of that year reflect the isolated impact of restored creditworthiness achieved by the Agreement, or the return to normal business conditions, newly undistorted by convertibility restrictions, or both. In the second case higher investment could still be observed. As a matter of fact, the decision to allow convertibility of current returns was not taken independently of the London Debt Agreement. To the contrary, the *Bank deutscher Länder* made the successful conclusion of the Agreement a precondition for subsequently relaxing capital controls (Dickhaus 1994, 148). On the aggregate level of Table 17, this conditionality means that the London Debt Agreement is undoubtedly the technical cause – whether directly or indirectly – for the large-scale return of foreign investment. Conditionality on the political level, however, need not prejudge the private decision-making process of individual foreign investors. It is possible that they made new investment into Germany primarily conditional on the successful settlement of pre-war debt. In this case convertibility restrictions represented merely a technical impediment of minor importance. Conversely, it is equally possible that they made new investment primarily conditional on the removal of convertibility restrictions. In this case the successful settlement of pre-war debt represented merely a technical precondition of minor importance, yet imposed from above for political reasons. These are two extreme scenarios, but they suggest the following important question: Did the London Debt Agreement in itself represent a sufficient condition for restoring German creditworthiness, as manifest in the development of foreign investment? Or was it 'merely' a necessary condition in that it facilitated the loosening of capital controls?

Asking how the settlement of outstanding pre-war debt impacted post-war foreign investment begs a follow-up question: How did outstanding pre-war debt impact post-war foreign investment in the first place? Which type of impediment to creditworthiness, if any, did these liabilities represent? Two possible types come to mind: On the one hand, outstanding pre-war debt might have constituted a looming solvency risk for individual debtors: Resuming debt service under a hypothetically harsh Debt Agreement would bankrupt them, because the high revaluation of outstanding debt would make their net worth negative. Thus any post-war investment would be lost as well, rendering the debtor not creditworthy in the first place. Under a less extreme scenario, outstanding foreign debt might have made it harder for these debtors to access credit markets even within Germany, as potential German creditors would be cautious to lend as long as the fate of pre-war foreign debt had not been decided. By implication these debtors would be less creditworthy to potential foreign investors as well, compared to German private companies or public jurisdictions that owed no outstanding foreign debt.

On the other hand, in the absence of individual solvency risk pre-war debt might still have constituted a source of currency risk, or more specifically, convertibility risk: Individual debtors would be financially able to both resume debt service under any counterfactual Debt Agreement and generate the returns on new post-war investment in *Deutschmark*. They would be prevented, however, from remitting abroad these payments at the same time. In the extreme case that no debt settlement would ever have been concluded, monetary authorities might never have lifted convertibility restrictions on current investment returns. The reintroduction of convertibility might have been short-termed if lifting restrictions had inevitably resulted in mass capital flight, as implied by Buchheim (1986, 224). In case of a harsh Debt Agreement Germany's currency reserves might have only been sufficient for debt service, leaving no room for investment returns. As a consequence the individual debtor would be creditworthy in *Deutschmark*, but not creditworthy for a foreign investor, as long as it was not clear precisely how costly the settlement of pre-war debt (and post-war aid) would be. As convertibility of returns on new investment would not be guaranteed, foreign capital owners would be deterred from investing in the first place. In contrast, solvency risk by definition only affected potential investment targets that owed outstanding pre-war debt, whether they were private companies or public jurisdictions in the form of the Federal Republic as the successor of the *Reich*, the individual states or any municipality. Convertibility risk, however, would have been independent of the individual investment target. Even private companies or sub-national jurisdictions that did not default on any foreign debt during the 1930s would have been affected, because limited availability of foreign exchange in the international monetary system of the 1950s would have been the binding constraint, not individual debtor characteristics. This observation suggests the empirical approach of testing which type of impediment to creditworthiness outstanding pre-war debt represented. More precisely, it allows for testing whether or not pre-war debt represented a solvency risk. This would be the case if the presence of pre-war debt had a negative and significant effect on post-war foreign investment across the universe of sub-national investment targets within the Federal Republic. It would also be the case if the settlement of pre-war debt, i.e. the removal of the solvency risk problem, increased investment into the debtors relative to the debt-free among all sub-national investment targets. The literature so far is ambiguous on whether outstanding debt represented a solvency risk to individual debtors. Rombeck-Jaschinski (2005, 240) quotes contemporary German sources saying that private debtors were by and large able to repay their foreign debts without risking insolvency. According to Grünbacher (2004, 157) on the other hand, the Debt Agreement did restore creditworthiness to the individual private debtor, in his case the successor companies of the *Vereinigte Stahlwerke*.

The second observation made by Buchheim (1986, 228) refers to the fairly restrictive official policy on the German side with respect to new foreign investment even after the conclusion of the London Debt Agreement. He notes the sharp upturn in both foreign portfolio and direct investment after 1958 when the *Deutschmark* was made fully convertible and restrictions on long-term capital inflows were removed. The *Bundesbank* thus "lost control" of foreign investment (Buchheim 1986, 229). Conversely, German authorities had imposed restrictions on the amount of inward foreign investment before 1958. By refusing as a rule to convert additional foreign exchange into *Deutschmark* for investment purposes, they made *Sperrmark* and *Libka-Mark* balances essentially the only source of investment finance. This policy implied a quantitative limit to the amount of foreign investment allowed to take place at any point in time, equal to the amount of *Sperrmark* or *Libka-Mark* balances on offer on currency exchanges outside Germany. Such quantitative limit, however, compromises the explanatory power of time series investment aggregates such as shown in Table 17 for the purpose of testing the effect of the London Debt Agreement on German creditworthiness. Foreign direct investment would arguably have been higher in the absence of these limits. In addition, the first upturn of foreign portfolio investment between 1953 and 1958 might to a large extent reflect so-called 'hot-money' flows (Buchheim 1986, 228). Since at least 1956 the *Deutschmark* was considered a candidate for appreciation, due to its balance of payments surpluses (Emminger 1986, 78). Therefore the cleanest way to isolate the marginal effect of the London Agreement on Germany's creditworthiness lies with analysing foreign direct investment, and moving beyond time series aggregates into the cross-section of direct investment projects. Fortunately, the contemporary requirement until mid-1955 to obtain an official licence for every single direct investment project allows for doing exactly that.

The German capital controls regime during the early 1950s

At the end of the War Allied governments decreed an embargo on foreign investment in Germany[108]. Not only were new investment projects prohibited, but all existing non-resident assets were blocked[109]. Trustees were appointed to manage subsidiaries of foreign parent companies and the latter did not fully regain control until September 1949[110]. Convertibility of investment returns and other liquid non-resident assets had first been restricted almost twenty years earlier in July 1931, and restrictions were gradually tightened under the National Socialist regime[111]. Any remaining legal conversion opportunities ceased after the break-off of Swiss-German relations in early 1945 (Frech 2001, 244)[112]. Investment returns or sale proceeds of assets were instead to be credited to blocked non-resident accounts with German banks, commonly referred to as *Sperrmark*. New regulations in June 1950 permitted the reinvestment of these balances by their owners for the first time since the end of the War, into by and large all types of assets within the Federal Republic[113]. While both real estate transactions and portfolio investments on German stock exchanges could be made without official restrictions, direct investment projects individually required a licence by an investment commission made up of German government and Central Bank officials[114].

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[108] Beckers (2014, 80-81) cites three reasons for the embargo: Firstly, *Reichsmark* was retained as Germany's currency until the reform of June 1948. It was practically worthless, which would have made it extremely cheap for foreign investors to acquire assets in Germany. Allied authorities wanted to avoid a widespread buyout of German industry by foreigners for political reasons. Secondly, reparation payments in the form of removing large parts of German industry were still official Allied policy immediately after the War. Such reparations could naturally not remove industry that was already owned by foreigners. Allowing large foreign investments would thus have prejudged the outcome of reparations negotiations among the Allied powers. Thirdly, new foreign investments would have created new claims against Germany's foreign exchange revenue in the form of investment returns. The Allies, especially the U.S., were not willing to allow this as long as it had not become clear that the German economy and a future German state would likely be able to raise the necessary revenue without further assistance by Allied taxpayers. Allowing it would also have had a negative impact on the position of pre-war creditors that had waited for their money for more than a decade (Kühne 1984, 51).

[109] Kühne (1984) provides an extremely detailed, chronological account of the development of West German foreign exchange regulations under Allied laws that remained in force until 1961.

[110] Since May 1949 non-resident owners could already sell their assets. They could also raise loans within Germany in order to cover operating costs or restore their assets to their pre-war state. This was strictly regulated, however, and the proceeds from selling assets had to be credited to non-resident blocked accounts, (Kühne 1984, 87).

[111] Banken (2006) provides a concise summary of German capital controls during the 1930s. He also explains the gradual hardening of foreign exchange restrictions in the context of National Socialist looting of Jewish property.

[112] For more details on the history of German exchange controls during the 1930s and 1940s, see Chapter One.

[113] *Sperrmark* could also be used for own travelling expenses inside the Federal Republic, the payment of taxes and the support of destitute relatives. Travel expenses and support payments were subject to official approval and tight monthly limits applied in order to prevent capital flight, cf. Kühne (1948, 130ff).

[114] Portfolio investment was literally free from official interference. Real estate transactions were in fact subject to a condensed approval procedure by the appropriate *Land* Central Bank, but approval was virtually automatic. Original English-language versions of the regulations governing foreign investment after 1950 can be found in Rhein-Main Bank (1951). The complete records of the Investment Commission can be found in the Federal Archives in Koblenz, under the records of the Federal Economics Ministry from B102.6735 to B102.6811.

The definition of direct investment covers direct loans and equity capital investments to German companies, including exchange-listed companies beyond mere portfolio investment. Direct loans were liberalized in early 1954, but individual licence requirements were maintained for all equity capital investments until June 1955. The commission was also charged with licencing the isolated instances when direct investments were financed by conversion of foreign exchange. There was no minimum amount invested below which the licencing requirement might have been waived. The records of the investment commission thus make it possible to observe the universe of foreign equity capital investment projects for almost five years during the first half of the 1950s, and the universe of direct loans from abroad to German companies until the end of 1953[115]. The official source naturally gives rise to concerns about bias in the data. Observed investment projects would be unsuitable for testing the impact of outstanding pre-war debt on foreign investment if criteria for granting licences had been arbitrary, or if these criteria had changed significantly just around the time the London Debt Agreement was concluded. The licencing regime, however, was liberal and essentially stable across the entire period. Only about nine percent of submitted projects in total were rejected by the commission. Projects were predominantly rejected in order to prevent illegal *Sperrmark* conversion. Especially loans to straw man trading firms could be used to unfreeze blocked balances before legal convertibility at the official exchange rate was restored during 1954[116]. Considerations of reciprocal treatment or sectoral protectionism do emerge from time to time in internal discussions among commission members, but they are by and large rejected for three reasons: Firstly, the commission worked under Allied supervision until the transfer of monetary sovereignty to the Federal Republic in the wake of the London Debt Agreement. Allied supervisors were keen on protecting the rights of non-resident *Sperrmark* owners, and there was to be no discrimination of foreign compared to domestic investors[117].

[115] The noteworthy exception are investments into West Berlin. Due to the complicated legal status of the city, projects concerning companies in West Berlin were authorized by the Berlin Central Bank, and the pertaining records could not be retrieved. It is highly unlikely, however, that this should influence the conclusions of this paper in any significant way. Due to the particular geographical isolation of the city under the circumstances of the Cold War West Berlin was likely not an important destination for foreign investment. Concerning the period of time covered by the Commission Data, the population of equity investment projects is in practice only observable up to and including March, i.e. the first quarter of 1955. This is due to the average delay needed to process a licence application between filing the application at the appropriate *Land* Central Bank and the decision of the investment commission at the Federal level. Applications between April and June 1955 still had to be filed under the established regulations, but were summarily approved after June, which means that the commission records do not systematically contain them anymore. Cutting off the data three months before the change in regulations also addresses the important concern about strategic expectations by applicants. Potential investors might have delayed their project deliberately for a short period immediately prior to the change in regulations, if the change was expected to happen soon. They would thus have avoided the bureaucratic burden and disclosing information about their project to German officials.

[116] For details, see Chapter One and Appendix C.

[117] Evidence of Allied insistence on liberal German implementation of Allied investment regulations can be found frequently in the Investment Commission records, such as in BArch B102.6736, 27. Sitzung (7.9.1951), Vermerk p. 1; *ibidem*, 34. Sitzung (7.12.1951), Vermerk, p. 2; or *ibidem*, 36. Sitzung (11.1.1952), Vermerk, p. 2.

Secondly, the German side was concerned that making the licencing regime more restrictive would be considered an unfriendly act during the negotiations and later the implementation of the Debt Agreement[118]. Finally, the Federal Republic had become an 'extreme creditor' inside the EPU already by 1953. Freely licencing disbursements from non-resident accounts was a way to accommodate pressure by other member states for Germany to relax restrictions on capital outflows (Dickhaus 1994, 150). Convertibility restrictions as such were relaxed incrementally following the successful ratification of the Debt Agreement. The first step was taken on September 30, 1953 when current returns on pre-1931 investments were made convertible with respect to countries that had signed the London Debt Agreement[119]. Further relaxations occurred on December 19 and finally on February 1, 1954, when current returns on all non-resident assets were made convertible with respect to all countries. *Sperrmark* balances as such could be converted to other EPU currencies after the introduction of so-called limited convertible non-resident DM accounts (*Beko-Mark*) on April 8 and to all currencies after September 13, 1954. *Sperrmark* were substituted by liberalized capital accounts (*Libka-Mark*) at the latter date. For the purpose of foreign investment *Sperrmark* and *Libka-Mark* can be treated identically. The former was the means of investing in Germany between July 1950 and September 1954. The latter inherited this role until complete liberalization of the capital account in July 1958[120].

One crucial regulatory change occurred on March 3, 1951, when *Sperrmark* became legally negotiable among non-residents. While there had been earlier black markets, this new regulation allowed for the emergence of official currency markets for so-called 'acquired' *Sperrmark*[121] outside the Federal Republic. From now on, a prospective investor who had never before owned any assets in Germany was able to newly commit her foreign capital to the German economy. On the level of the German balance of payments, she would buy an existing claim against Germany from another non-resident, not giving rise to any additional capital inflow. On the individual level, however, she would have exchanged capital in her home country against capital in Germany. Subsequently disbursing the acquired *Sperrmark* balance for a German asset of her choice would create genuinely additional foreign investment on the individual, if not on the macro level.

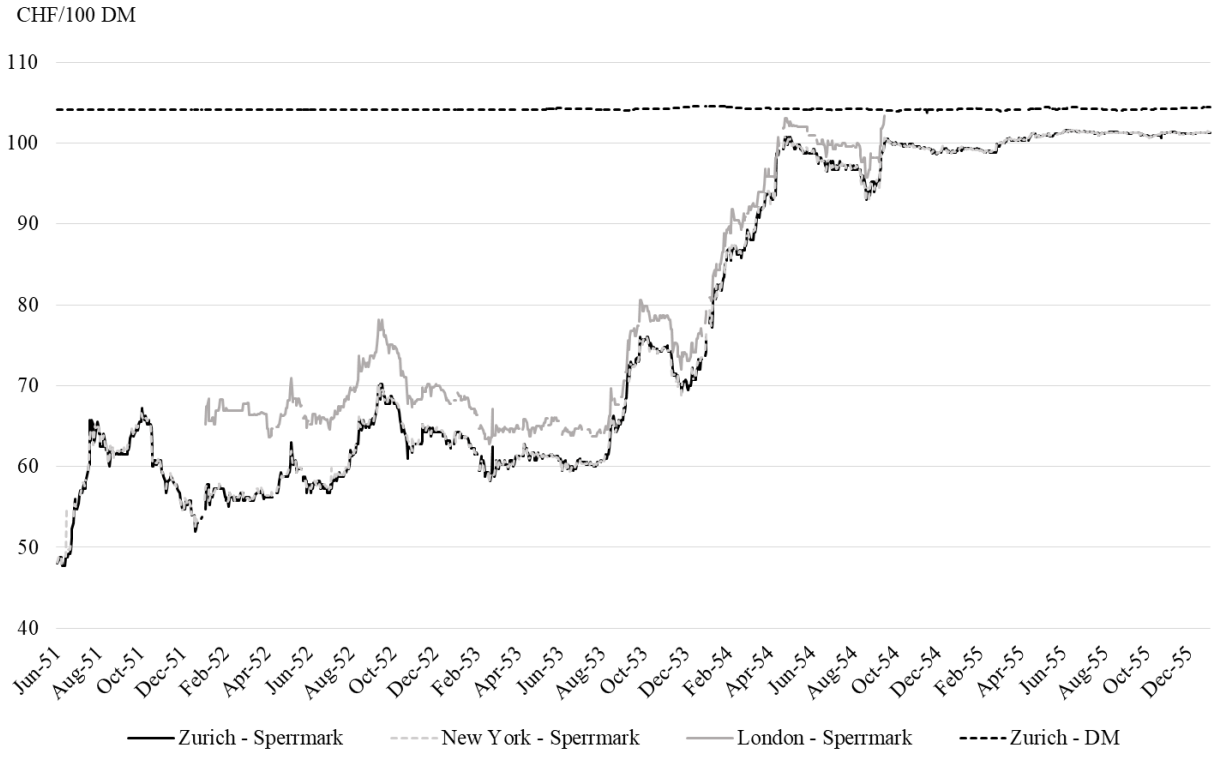
[118] During the period of the London Conference in spring 1952 the Investment Commission considered the tightening of investment regulations "inopportune", see BArch B102.6736, 44. Sitzung (5.5.1952), Vermerk, p. 2.

[119] The very first relaxation occurred on August 7, 1953, when Israeli citizens who could prove personal hardship were henceforth allowed to spend 200 DM per month out of their blocked accounts in order to purchase groceries in Germany and have them sent to Israel.

[120] The preceding chronology can be verified in Kühne (1984), p. 50, 86, 311, 407, 410 and 641.

[121] In the absence of legal negotiability, *Sperrmark* balances were exchanged among non-residents with the help of irrevocable powers of attorney (Dernburg 1955, 24). The buyer could effectively dispose of the balance, while the seller, i.e. the original owner, would continue to appear in all subsequent transactions officially as the owner of the balance.

Table 18: Daily *Sperrmark* prices in Zurich, New York and London (converted into CHF).



Source: Daily issues of Neue Zürcher Zeitung (Zurich), Financial Times (London), New York Herald Tribune and New York Times (New York)

Table 18 shows the development of the three most important international markets for *Sperrmark* during the first half of the 1950s, as identified contemporaneously by Dernburg (1955, 25). Regular daily price quotations for New York and Zurich first appeared in June 1951, three months after the legalisation of markets. Quotations for London start in January 1952 and end with the transition from *Sperrmark* to *Libka-Mark* in September 1954. Overall, the *Sperrmark* exchange rate oscillated at around 60 CHF for 100 DM until August 1953, when it started to rise rapidly towards the official CHF-DM exchange rate. After September 1954, it remained fairly stable until the end of 1955, at a slight discount with respect to the official rate. Among the three markets Zurich was the most important. As with any other currency market the crucial market makers were large private banks[122]. This is reflected in the fact that about 46 percent of acquired *Sperrmark* balances were owned by Swiss nationals at the end of 1953, while banks owned 57 percent of the Swiss share[123]. In contrast, Dernburg (1955, 25) notes that trading on the New York market was at times "rather sporadic". The listed prices for New York do in fact track the Zurich prices very closely, if converted into Swiss *Francs*. This likely reflects a highly integrated market between the only two financial centres with convertible national currencies during the early 1950s.

[122] The role of banks in foreign exchange markets of the 1950s is confirmed for New York by Holmes (1960).
[123] See HABB B330.76.2, Anlage 1 zum Prot. der 166. Sitzung des Zentralbankrats vom 31.3.1954.

The London Debt Agreement and the market for acquired *Sperrmark*

The identification of *Sperrmark* and *Libka-Mark* as the *Deutschmark* of the foreign investor calls for testing the impact of the London Debt Agreement on the international *Sperrmark* market. Specifically it calls for applying established time series structural break methodology to daily *Sperrmark* prices. A significant effect of the London Agreement on German creditworthiness should translate immediately into international prices of the means of investing in the Federal Republic. A rational investor would buy *Sperrmark* instantly after the conclusion of the Agreement, if she believed that the latter would directly result in increased investor interest in German assets, because this would inevitably lead to higher *Sperrmark* prices given supply. The predominant role of the Zurich market and the extremely close correlation of prices on different markets makes the *Sperrmark* price in Zurich the natural candidate for estimation purposes[124].

Three objections come to mind when using *Sperrmark* prices in structural break estimations. Firstly, this somewhat dubiously sounding *Sperrmark* market might just be extremely thin during the entire time period under consideration, and not only in New York but everywhere. The driving force behind any estimated structural break might just be single, erratic transactions that dominate the entire market, while the newspaper quotations in between might be only notional. There is strong evidence that this was not the case. Kostolany (1961, 236) talks of large volumes traded both in Switzerland and the United States. Table B.3 in Appendix B provides monthly turnover data for acquired *Sperrmark* between October 1951 and November 1953. With one slight exception turnover was always higher than 100 million DM per month. In comparison, by a wide margin the single biggest direct investment project between 1950 and 1955 was a 50 million DM capital increase of *Deutsche Shell AG* by *Anglo-Saxon Petroleum Company Ltd*[125]. Three quarters of equity capital projects were smaller than 50,000 DM, and three quarters of direct loans to German companies were smaller than 150,000 DM.

[124] Zurich is also most adequate on a practical level, because its Saturday market results in more daily price quotations than for New York or London, which apparently traded Monday to Friday only.

[125] In fact, the single biggest direct investment project during that period was the sale of *Harpener Bergbau AG* by the German *Flick* group to the French heavy industry consortium *Sidéchar*. *Flick* sold a 60% majority of the shares (nom. about 76 million DM) to the French consortium for a total price of 180 million DM in May 1954. Of these, 76.5 million DM were paid in French Francs, and the remainder via the EPU clearing mechanism, that is, in Gold or US-$ (cf. B330.2849: Vermerk betr. Zulassung neuer mittel- und langfristiger Devisenanlagen des Auslandes im Inland of July 28, 1954). I exclude this transaction from my data for three reasons: Firstly, the sheer size of the transaction and its relation to Allied deconcentration efforts turned it into a matter of international diplomacy that received newspaper attention (such as the Frankfurter Allgemeine Zeitung of Monday, May 10, 1954, p. 7: "Die Harpen-Majorität ist verkauft"). It would thus be absurd for this specific case to maintain the assertion of the previous section that German regulation of inward foreign investment was immune to political considerations. Secondly, by its size it represents an extreme outlier value that would distort empirical results for the entire data set if it was retained. Thirdly, its peculiar terms of payment are highly unusual for the period and do not fit the pattern applicable to all other investment projects. Priemel (2007, 690-3) provides a detailed account of this case in the wider context of the history of the *Flick* group.

The *Sperrmark* market was also fairly liquid in relative terms. Monthly turnover amounted to an average of 78 percent of all existing acquired *Sperrmark* balances. Secondly, the sharp rise in prices from August 1953 onwards may be supply-driven instead of investor demand-driven. As pointed out above, there was political conditionality between the successful conclusion of the London Debt Agreement and the relaxation of convertibility restrictions. The owner of an original *Sperrmark* account – for example a 'restituted' émigré victim of National Socialist persecution[126] - would have desisted from selling her account during the summer of 1953 if she expected that she would be allowed to convert it at the much higher official exchange rate soon. Thus the rise in prices after August might be due to a supply-side drying up of the market. It would be a fallacy to attribute it to the demand side of renewed investor confidence. Even though the available data are unfortunately patchy, Table B.4 in Appendix B shows that this cannot have been the case. The monthly sales of *Sperrmark* by their original owners do not drop in any readily discernible way during the second half of 1953. The monthly amount sold after August 1953 lies within the usual range of the previous two years, both absolutely and relatively as a share of the end-of-month total of acquired *Sperrmark* balances overall. Moreover, Table B.3 shows that turnover in absolute values increased notably in August and September 1953, which constitutes additional evidence against a drying-up of the market after the conclusion of the Debt Agreement.

Thirdly, inference from *Sperrmark* prices to private investor expectations would be untenable if there had been official intervention in the *Sperrmark* market, for example by the German Central Bank. The latter might have had a desire to create the impression of improved German creditworthiness by propping up the *Sperrmark* rate. The Bank of England in fact intervened in similar markets for Sterling accounts at the time (Schenk 2010, 111). If this was the case for *Sperrmark* it would not be possible to isolate private investor behaviour from official intervention, especially if the timing and volume of intervention was unknown. However, to the best of my knowledge there was no such intervention by the *Bank deutscher Länder* or any other official institution. Occasional discussions indeed took place about intervening in the *Sperrmark* market. Proposals were aired about using *Sperrmark* to be bought cheaply by the *Bank deutscher Länder* in order to provide financial aid to Berlin or to promote German exports.

[126] Restitution payments represented a considerable source of non-resident blocked accounts. The Allied restitution laws enacted during the late 1940s were in principle limited to restoring property of physical objects to persecuted individuals or their heirs. Compensatory payments could be made if physical restitution was not possible or if both the persecuted claimant and the intermediate owner wanted to avoid litigation. Most claimants lived outside Germany by the end of the 1940s. Such payments were not directly convertible, however, and had to be credited to non-resident blocked accounts just like any other non-resident claim. There is large literature by now on the question of National Socialist looting of property as well as compensation after the War. For a recent, comprehensive overview cf. Goschler (2005).

However, such considerations were consistently rejected by the Central Bank Council, which called the price of *Sperrmark* abroad "completely ignored" as late as September 1953[127]. Intervention was considered too delicate on a political level. Export price dumping via *Sperrmark* transactions was a notorious method of choice for the *Reichsbank* during the 1930s, leading to widespread resentment among creditors (Ebi 2004, 40). After the War, using *Sperrmark* for export promotion would have been in violation of Allied laws and would also have conflicted with the Federal Republic's new commitments under GATT[128].

The estimation of structural breaks or turning points in time series has been introduced first into the field of economic history by Willard et. al (1996) in their seminal study of the Greenback Market during the US Civil War. Their paper has subsequently triggered a wave of studies using different modifications of their original model in order to estimate break points in a variety of historical settings. Whereas Willard et. al (1996) themselves, as well as Weidenmier (2002) and recently Hileman (2017) study currency markets, most of the literature employs bond prices. In a German context, Frey and Kucher (2000) and later Frey and Waldenström (2004) analyse the markets in Zurich and Stockholm for German bonds during the Second World War based on monthly bond price indices. Brown and Burdekin (2002) use weekly closing prices of the Dawes and Young bond in London from 1933 to 1945 to estimate turning points in British perception of National Socialist Germany. Jopp (2014) in turn studies the performance of German bonds on the Amsterdam market during the First World War and its immediate aftermath. The appeal of this widely used model lies with the fact that structural breaks are identified independently of preconceived notions at which point in time such a turning point should occur. As Willard et. al (1996, 1005) note, not every large price movement observed in the data is necessarily explained by the impact of some historical event. The estimation of turning points is done in a three-step procedure: In the first step, an autoregressive model is estimated with Ordinary Least Squares for a rolling window of 100 days length over the entire time series[129]. Rather than the *Sperrmark* price itself, the discount of the *Sperrmark* price to the official exchange rate between Swiss *Francs* and *Deutschmark* seems better suited for this purpose.

[127] HABB B330.72.2, Prot. der 154. Sitzung des Zentralbankrats am 30.9.1953, Anlage, Bericht von Herrn Dr. Emminger über den Verlauf der Jahrestagung der Weltbank und des Weltwährungsfonds in Washington, p. 19.

[128] BArch B102.6737, 65. Sitzung (6.3.1953), Vermerk p. 3: "Abgesehen von den entgegenstehenden devisenrechtlichen Bestimmungen begegnet die beantragte Verwendung erworbener DM-Sperrguthaben auch handelspolitische Bedenken. Die Havanna-Charter hat den beteiligten Nationen ausdrücklich auferlegt, auf Dumping-Maßnahmen zur Förderung des Exports zu verzichten. Eine Verbilligung des deutschen Exports durch Verwendung erworbener DM-Sperrguthaben würde zweifellos als eine solche Dumping-Maßnahme […] angesehen werden und entsprechende Abwehrmaßnahmen herausfordern".

[129] The choice of 100 days as window size is standard in the literature, following Willard et al. (1996, p. 1008).

The official exchange rate clearly served as a benchmark for *Sperrmark*, especially after the introduction of direct convertibility in September 1954, even though it was technically not an upper bound. In addition, the opening of controlled foreign exchange markets for a number of European currencies in May 1953 transformed the official exchange rate from a fixed clearing rate to a market exchange rate, even if within narrow bands. By using the discount I can thus control for factors that influence both the official and the *Sperrmark* exchange rate at the same time, which allows for better isolating the impact of investment demand for *Sperrmark*. The discount Dis_t at time t of the *Sperrmark* price S_t to the official exchange rate DM_t is given by $Dis_t = \frac{DM_t - S_t}{DM_t}$. Using the Dickey-Fuller generalized least squares test I cannot reject the presence of a unit root at conventional levels of significance, neither for the natural logarithm of the *Sperrmark* price itself nor for the natural logarithm of the discount. For this reason the model is estimated in first differences, which is equivalent to the returns of the discount so to speak. Both the Schwartz information criterion and the backward selection procedure according to Perron (1989) suggest a lag length k of 1 for the autoregressive process. The model for the first differences of the logged *Sperrmark* discount is thus given by

$$\Delta\ln(Dis_t) = \beta_0 + \beta_1 \Delta\ln(Dis_{t-1}) + u_t \qquad (6)$$

The first window of estimation is given by June 25, 1951 until October 2, 1951[130]. For each window I test the significance of the coefficient of an indicator variable that is one on and after the middle of the window and zero otherwise. I thus test for the potential presence of a break in the intercept of the model occurring in the middle of the window. The larger the related F-test statistic, the less well the model under the null hypothesis of no break in the intercept fits the data within the window, potentially indicating a break in the mean of the entire time series. The window is subsequently moved one day further, the estimation is performed anew, and the F test statistic for the break indicator is recovered, until the entire time series has been covered. Table 19 yields the resulting plot of F test statistics. In the second step, significant outliers among all F test statistics from the first step are identified via Monte-Carlo simulated critical values[131].

[130] The window starts on June 25 rather than June 1 in order to allow for its extension by 25 days in the third step.

[131] The 99% critical value is given by 6.467, the 98% equivalent is given by 5.294. The outlier F-statistics for the breaks on August 8, 1953, and August 20, 1954, are in between these two values and therefore represent only marginally significant outliers. For comparison, the 95% critical value is given by 3.688. Similarly to Willard et al. (1996, 1009), I generate critical values for the first-step F-statistics in three steps: First, I simulate a time series of length T=1,000 based on the null model without break $y_t = 0.0017 - 0.0463 \cdot y_{t-1} + \varepsilon_t$, where $\varepsilon_t \sim N(0,1)$ and the coefficient values are taken from an AR(1) model of first differences of the *Sperrmark* discount. In the second step, I estimate the model with a break in the middle of the simulated time series and retrieve the F statistic of the break indicator variable. Thirdly, I repeat the first two steps 5,000 times. The quantiles of the distribution of the 5,000 F statistics represent the simulated critical values. These values are very similar for a range of choices regarding the coefficient values for the null model.

Table 19: First step F-statistics identifying windows in which a structural break likely occurs.

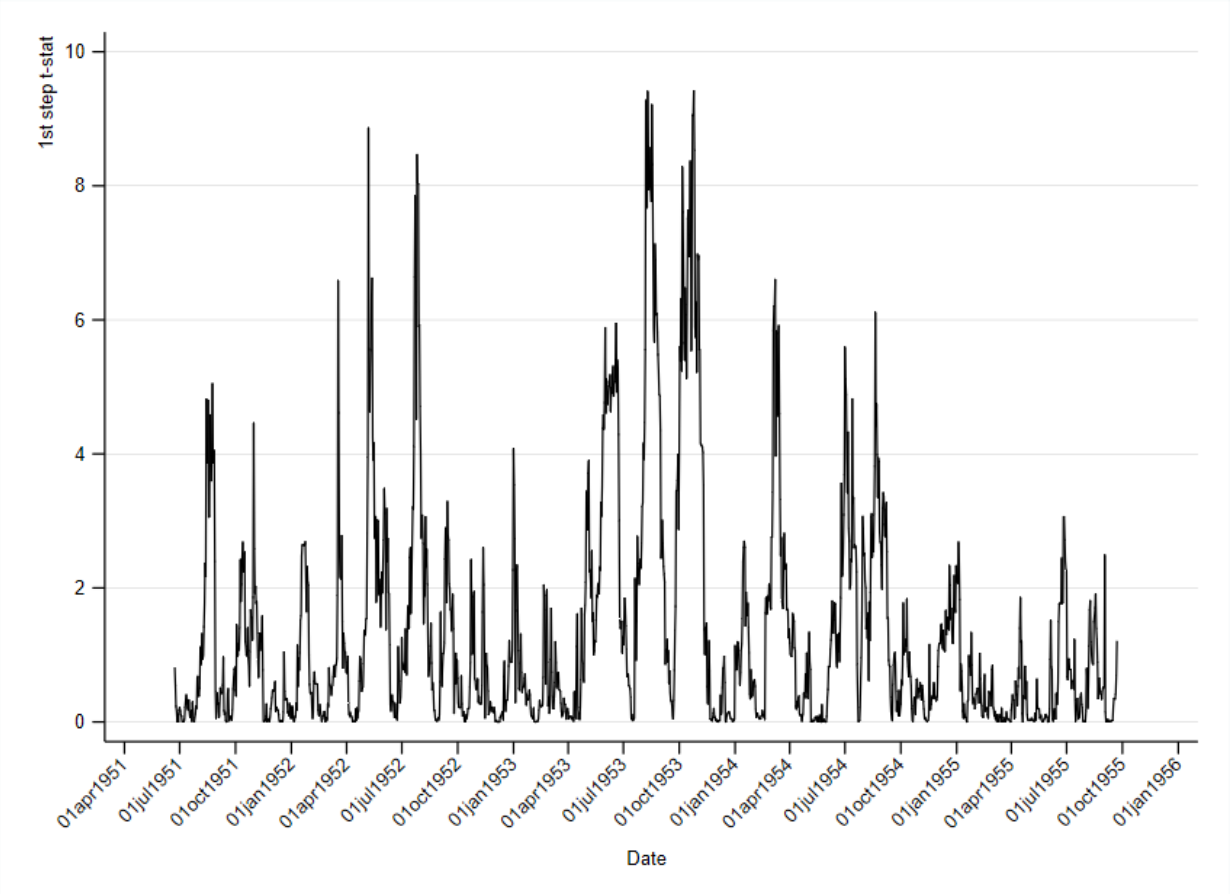
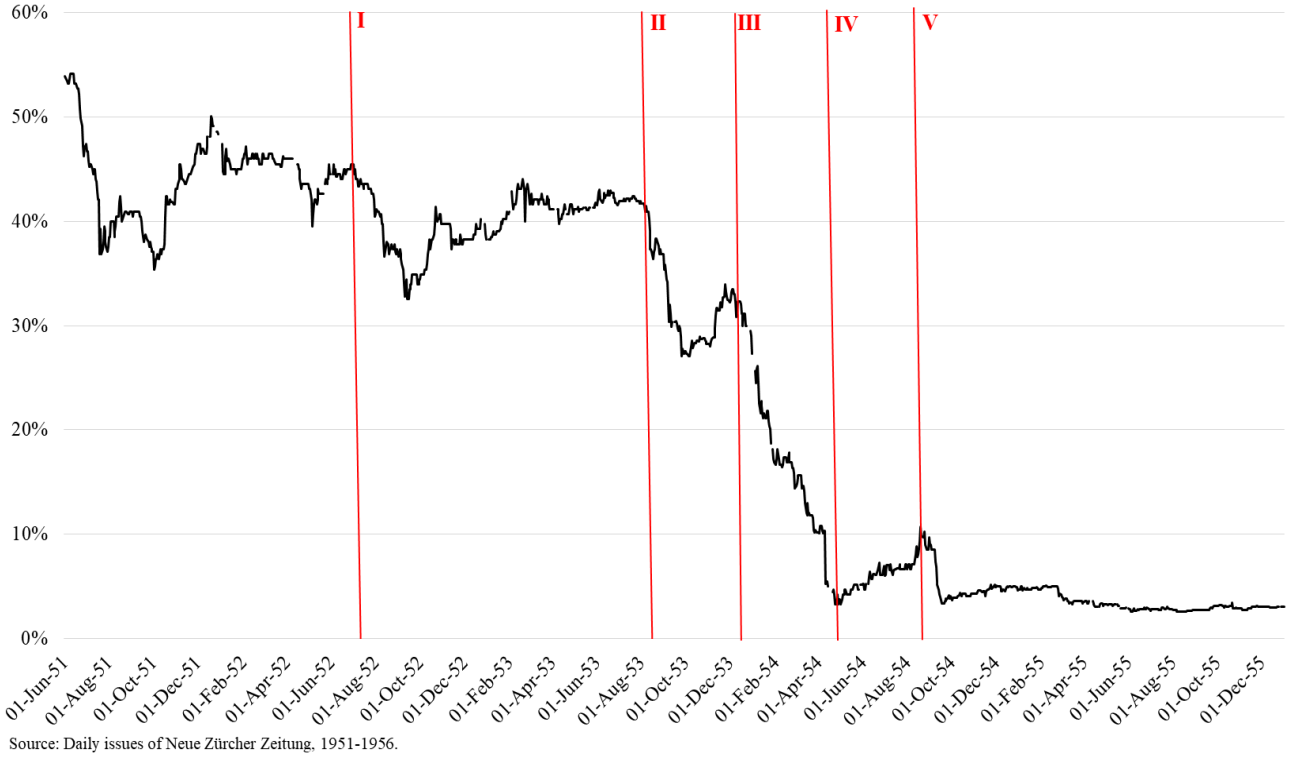


Table 20: Identified turning points in the *Sperrmark* discount in Zurich.



Source: Daily issues of Neue Zürcher Zeitung, 1951-1956.

The identified outliers are the candidates for windows most likely to contain an actual break in the mean of the entire return series. The third step is then dedicated to finding the specific day within each of the identified windows that corresponds to the actual break, which does not necessarily have to be the middle day imposed in step one. To do this, the following model is estimated recursively within each window:

$$\Delta\ln(Dis_s) = \beta_0 + \beta_1\Delta\ln(Dis_{s-1}) + \beta_2 BR_s + u_s \qquad (7)$$

where $BR_s = \begin{cases} 1 \ if \ t \geq s \\ 0 \ otherwise \end{cases}$ is an indicator variable that is one for all days t greater or equal to step s of the recursive estimation and $s = [1{,}100]$. In other words, I estimate 100 regressions in each candidate window, and move the break indicator BR_s one day further at a time. The one step $t = s$ with the highest F-statistic for BR_s then corresponds to the estimated break date. In order to include the days at the very beginning and end of the 100-day window, I enlarge the window by 25 days on each side for the third step.

Table 21 yields the estimated break dates and Table 20 visualizes them in a graph of the *Sperrmark* discount. The first estimated break occurs on July 30, 1952. The estimated percent change in the mean of the differenced series of -0.47% corresponds to a drop in the discount over the following month of 11.4%. There is no direct indication in contemporary newspapers of why the *Sperrmark* price rose to such an extent, but two explanations can plausibly be ventured: The Federal Republic joined the International Monetary Fund and the World Bank on July 28, 1952. The commitment of the IMF to eventual, full current account convertibility of member currencies could have raised hopes for greater *Sperrmark* liberalization in the near future. Equally plausible would be an early expectation of the successful conclusion of the Debt Conference in London that would occur on August 8. The negotiations themselves, however, were protracted and success was not assured until the very end (Rombeck-Jaschinski 2005, 345ff). This does not preclude the possibility of optimistic market expectations, yet there is also no evidence to that effect. The development was apparently not driven, however, by large-scale foreign investment operations in Germany. The slow rise in the *Sperrmark* price already during the first half of July was reportedly driven by Swiss arbitrage in *IG Farben* stocks between Zurich and Frankfurt[132]. The faster rise in early August on the other hand was said to have put off foreign demand on German stock exchanges as it made portfolio investment relatively more expensive[133].

[132] Frankfurter Allgemeine Zeitung of Thursday, July 17, 1952, p. 10: "Arbitrage in I.G.- Aktien."
[133] Frankfurter Allgemeine Zeitung of Saturday, August 2, 1952, p. 6: "Freundlicher Wochenschluss; Frankfurter Allgemeine Zeitung of Tuesday, August 5, 1952, p. 8: "Freundliche Grundstimmung an den Börsen".

Table 21: Estimated break dates for the first difference of the *Sperrmark* discount[134].

Estimated turning points	Estimated percent change in return of discount	Plausible cause
July 30, 1952	-0.47%	The Federal Republic joining IMF and World Bank on July 28. Possibly expectation of successful London Debt conference on August 8.
August 8, 1953	-0.5%	Expectation of early start of debt service under the London Debt Agreement. Expectation of further *Sperrmark* liberalization after Adenauer victory in elections. Bill proposed by U.S. Senator Dennis Chavez to return West German property in U.S. Early *Sperrmark* convertibility for hardship cases of Israeli citizens.
Dec 15, 1953	-1.18%	Expectation of imminent further relaxation of convertibility restrictions on December 19.
April 25, 1954	3.42%	Swiss banks liquidating their speculative *Sperrmark* holdings.
August 20, 1954	-1.82%	Rumours of further liberalization "boom" *Sperrmark*.

There is much more direct evidence for the next break date, August 8, 1953. The 0.5% negative shift in the mean of the differenced series corresponds to a decline in the discount over the following month of almost 24%. On the previous day the *Bank deutscher Länder* authorized a narrow window for *Sperrmark* convertibility for the first time since 1931. Israeli citizens who could prove personal hardship were henceforth allowed to spend 200 DM per month out of their blocked accounts in order to purchase groceries in Germany and have them sent to Israel[135]. The reform seems petty and fits into the broader history of post-war Germany's bureaucratic treatment of the victims of National Socialism. It did, however, represent the very first move towards *Sperrmark* liberalization after the War. This possibly triggered expectations outside Germany of future liberalization soon, driving down the *Sperrmark* discount. The coincidence is striking and the argument appealing, yet there is no direct evidence in support of this story. Such evidence, on the other hand, is provided by the New York Times of August 18[136]. Under the headline "*Zurich interprets Sperrmark's rise*" it ran an extended article explaining the price rise of late.

[134] The estimated percent change in the return of the discount is calculated following Jopp (2014, 173) and is given by $100 \cdot [\exp(\beta_2) - 1]$, where β_2 is the coefficient of the indicator variable BR_s in the third-step regression equation (7) above. In general, the time series used for identifying turning points in the first differences of the *Sperrmark* discount need to be interpolated for estimation purposes. I do so by assigning the most recent available value to the days without their own values (lagged interpolation). The alternative would be linear interpolation, which is less appealing from a theoretical point of view, as it assumes a specific, that is, linear path for price formation. Lagged interpolation, on the other hand, takes existing prices as given, as long as no new price signal is recorded in the data. Jopp (2014, 181) also uses lagged interpolation.

[135] Frankfurter Allgemeine Zeitung of Saturday, August 8, 1953, p. 7: "Beschränkte Sperrmarkfreigabe".

[136] The New York Times of Tuesday, August 18, 1953, p. 39: "Zurich interprets Sperrmarks' rise".

Market participants in Zurich reportedly expected an early start of debt service under the London Agreement: "*Foreign exchange experts in the service of Swiss commercial banks explain the sudden revival of interest in sperrmarks as conviction of many Swiss investors that to accelerate the recovery of German creditworthiness the Bonn Government will go to any feasible limit in making concessions to creditors. They say the amazing increase in prosperity in Germany is destined to enable the German Government to go much further than at first seemed possible*." Interesting in this context is the association of the London Agreement, the expectation of imminent liberalization of capital controls, and Germany's renewed prosperity. The Agreement was clearly seen as a necessary precondition for liberalization, yet liberalization aided by large currency reserves itself drove expectations: "*Belief that removal of the last technical hindrances will enable the German Government to resume debt service soon, as provided by the London debt agreement of Feb. 27, 1953, and possibly allow resumption also of foreign-owned shares […] resulted in a sudden large-scale demand for sperrmarks in Zurich last week at sharply rising prices"*. Rising prices were subsequently sustained by expectations that Konrad Adenauer's coalition would secure an election victory on September 6, while the ruling coalition on the Federal level was seen as a guarantor of creditor interest. The New York Times of September 7 reported that Adenauer's victory had already been priced in by the time of the election[137]. The Chancellor was expected to *"[…] make re-establishment of Germany's credit standing his first major aim to accomplish which no efforts would be spared to resume the transfer of the earnings of all foreign-owned German investments as soon as feasible*." A fourth influence might have come from a simultaneous legislative initiative in the United States. U.S. Senator Dennis Chavez of New Mexico introduced a bill that was to restore sequestered property in the U.S. to their West German owners. The initiative reportedly caught great attention across Western Europe and was seen as an important step towards normalization of relations with Germany, specifically towards *Deutschmark* convertibility[138]. Then again there is no direct evidence supporting any effect on *Sperrmark* prices. The rise in prices was also noted on the German side[139], which reportedly triggered considerable profit-taking by foreign investors on German stock exchanges[140]. The next large-scale decline in the *Sperrmark* discount occurred after December 15, 1953. An estimated 1.18% drop in the mean of the differenced series translates into a decline in the discount itself by over a third over the following month.

[137] The New York Times of Monday September 7, 1953, p. 26: "Sperrmarks soar on Adenauer aims".
[138] The New York Times of Monday, August 10, 1953, p. 35: „Swiss study bill on War seizures".
[139] Frankfurter Allgemeine Zeitung of Monday, August 10, 1953,p. 7: "Wachsendes Interesse für deutsche Sperrmark".
[140] Frankfurter Allgemeine Zeitung of Thursday, August 13, 1953,p. 8: "Teilweise Gewinnmitnahmen an den Börsen".

Evidence on the reason for this break is much scarcer than for the previous one, but the coincidence with the substantial further relaxation by the *Bank deutscher Länder* of convertibility restrictions on current investment returns on December 19 is striking (Kühne 1984, 311). Three weeks later, the Frankfurter Allgemeine Zeitung quotes "foreign exchange markets abroad" saying that the primary reason for the prolonged rise in prices was indeed the liberalization of *Sperrmark* convertibility. "International speculation" was reportedly buying up *Sperrmark* in the expectation of further liberalization[141]. Conversely, such speculation could also backfire. April 25, 1954 is the estimated date for the only break in the intercept of the differenced series that has a positive sign. The discount correspondingly rose by 42% over the following month. This reversal did not go unnoticed. The New York Times reported that the sustained drop in *Sperrmark* prices until August was due to Swiss banks largely selling their speculative *Sperrmark* positions that they had accumulated in the expectation of quick steps towards full convertibility by the *Bank deutscher Länder*[142]. Other reports mentioned conversion operations of standstill debt via *Sperrmark*, but also a certain narrowness of the market as reasons[143]. The final estimated break date is August 20, 1954. The mean shift of the differenced series by -1.82% corresponds to a two-thirds reduction in the discount within one month. Again there is no direct evidence on what caused this turnaround, but it was likely due to renewed speculation about an imminent further relaxation of convertibility restrictions. The New York Times noted on September 10 that the recent "Conversion rumour booms sperrmark"[144]. *Sperrmark* was replaced by the yet more liberalized *Libka-Mark* on September 13. In any case the discount had come down dramatically from about 30% in early January to virtual parity with the official exchange rate in September.

The preceding discussion has shown that the London Debt Agreement certainly played an important role in bringing about renewed confidence by foreign investors towards the German economy. It was the necessary condition for the rapid relaxation of convertibility restrictions, on the political level but also for market participants, if contemporary newspaper reports are to be believed. Measured by the development of the *Sperrmark* market, however, the Agreement in itself was not a sufficient condition to restore Germany's creditworthiness. It is notable that none of the dates directly associated with the negotiation, the signing, or the ratification of the Agreement appear to have been turning points for *Sperrmark* prices.

[141] Frankfurter Allgemeine Zeitung of Thursday, January 7, 1954, p. 9: "Ein Vertrauensbeweis".
[142] The New York Times of Monday, August 23, 1954, p. 23: "Sperrmark drops on Zurich market".
[143] Frankfurter Allgemeine Zeitung of Friday, August 20, 1954, p. 9: "Geringere Hoffnungen?".
[144] The New York Times of Friday, September 10, 1954, p. 34: "Conversion rumour booms Sperrmark".

Outstanding pre-war foreign debt and post-war foreign investment

The double function of *Sperrmark* represents a certain caveat to employing *Sperrmark* price developments as an indicator of foreign investor interest in Germany: On the one hand, it served as the means of non-residents for purchasing assets within the Federal Republic. On the other hand, it represented a speculative asset in itself. Buying *Sperrmar*k in July 1953 and holding it for one year would have resulted in a profit of more than 60 percent. Speculating on the strengthening of the German currency does represent an expression of confidence in the German economy (Kostolany 1961, 236), yet it does not directly imply that long-term foreign investments into German assets were forthcoming. After all, *Sperrmark* positions could have been liquidated quickly if the tide had been turning at any point. The same cannot be said, however, of long-term foreign investment into the Federal Republic. Fully measuring the impact of the London Debt Agreement on Germany's creditworthiness abroad therefore requires measuring its contemporaneous impact on Foreign Direct Investment. Measuring the impact of the debt settlement on FDI in turn raises the question of which type of obstacle to creditworthiness, proxied by the development of FDI, outstanding pre-war debt represented in the first place. The previous theoretical discussion has already suggested the way to test whether pre-war debt represented a solvency risk for German debtors. Ideally, the effect of pre-war debt on post-war investment would be tested on the basis of the universe of German companies during the early 1950s. Following the above line of argumentation, pre-war debt would have represented a solvency risk if companies with outstanding pre-war debt had ceteris paribus received less post-war investment than their debt-free peers, while convertibility risk was independent of the individual German company characteristics. Unfortunately, the investment commission data does not contain systematic information on whether a particular German investment destination owed pre-war foreign debt.

The most highly disaggregated, comprehensive information on pre-war indebtedness which has, to my knowledge, survived, is on the level of post-war German districts. In 1950, the *Bank deutscher Länder* commissioned a census of existing pre-war indebtedness in preparation of the London negotiations. Questionnaires were sent out to German companies and public jurisdictions demanding information on the level of their outstanding pre-war indebtedness as of September 1950. Aggregated answers on the district level have survived in the *Bundesbank* Archive[145]. The strength of the data lies with their comprehensive coverage of outstanding pre-war debt across Germany, due to their origin as official census data.

[145] The records can be found in the *Bundesbank* Archive under HABB B330.2464.

On the other hand, they suffer from a number of problems: First of all, their informational value is compromised by the high degree of their aggregation. For each district, they only give three aggregate numbers according to the currency in which the debt has been incurred, which are *Reichsmark*, *Goldmark* and *other currencies*. The latter category includes all obligations denominated in foreign currencies or in *Deutschmark*. It is thus not possible to distinguish between types of indebtedness, which range from publicly issued, bonded debt to dividends payable to non-resident owners. Nor is it possible to distinguish between different types of debtors. Therefore, the data also include inter-company liabilities between German subsidiaries and their foreign parents. The sign of the effect of pre-war debt on post-war foreign investment might thus be biased upwards, because pre-war investors were likely to also invest in their German subsidiaries after the War, rather than in any other German asset, regardless of the amount of outstanding inter-company balances. Moreover, the fact that the category *other currencies* was aggregated using 1950 exchange rates represents a complication regarding data interpretation. The solvency risk implied in pre-war debt depends on how pre-war obligations are converted into post-war values, or more precisely how potential post-war investors thought they would be converted at the time. Most importantly, however, the census data as such were unobservable to the prospective post-war foreign investor. Beyond the company that she was planning to invest in, she could only have had a rough idea about the overall level of foreign indebtedness in any one district.

To control for these problems, I use an additional measure for outstanding pre-war debt, which was both observable to an outsider and distinguishable as to the identity of the debtor. Glasemann (1993) provides a comprehensive list of all German external bonds issued during the interwar period. Having been issued, they were observable in principle, and their prospectuses allowed for identifying the debtor. Glasemann (1993) further indicates whether a particular bond had been redeemed completely before the outbreak of the War. Nevertheless, the measure has two shortcomings: Similarly to the census data, there is the question of how to value outstanding bonds for the post-war period, and to which extent the result conforms with contemporary perceptions, all the more so as they were issued in more than one national currency. For the illustrative purpose of Table 22, I convert the amounts given in Glasemann (1993) from their respective currency into US-$ at the average exchange rate of March 1933, the month before the United States went off the interwar gold standard[146]. However, this is clearly only one of many possible ways. The second shortcoming concerns the low number of observations on the sub-national level for which the liable debtor is uniquely identifiable on the district level.

[146] Exchange rates are taken from the Banking and Monetary Statistics of the U.S. Federal Reserve Board (1943, 662).

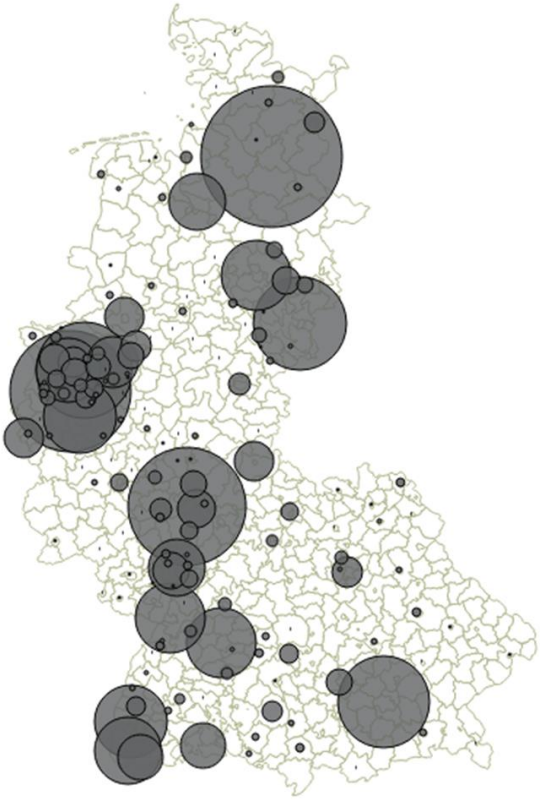
It is true that a large number of local entities borrowed heavily abroad during the 1920s (James 1985, 45). At the same time, a considerable fraction was represented by public utilities, such as the *Rheinisch-Westfälische Elektrizitätswerke*, which were co-owned by a multitude of different local governments or were public-private partnerships. Similarly, large corporations such as the *Vereinigte Stahlwerke* that issued external bonds were, at least economically, not attributable to one particular local district. The ultimate number of observations therefore reduces to 26 districts for the Glasemann (1993) data, consisting only of municipal bonds, that is, bonds issued by city or district administrations.

Despite these shortcomings, it is still worthwhile to examine the influence of pre-war debt on post-war investment on the district level. Recently reviewed by Nielsen et al. (2017), the large literature on the locational choice of Foreign Direct Investment has singled out various factors which influence geographical location decisions. Taxation and infrastructure in the host environment are among the traditional choices. All else given potential investors will choose the local jurisdiction with least taxation (Hines 1999) and best public infrastructure (Fung et al. 2005). A large amount of outstanding foreign debt influences both. A number of West German municipalities carried outstanding foreign debt themselves. In the event of a particularly burdensome debt settlement these municipalities would likely have been forced to raise local taxes and spend less on public infrastructure. Since the 1920s local business taxation had been the most important source of local government revenue in Germany, providing up to two thirds of total municipal tax revenue during the first half of the 1950s (Heni 1991, 297). Foreign investors would therefore have been forced to finance foreign debt repayment themselves. The reliance of local public budgets on business taxation also provides the indirect channel between outstanding private foreign debt on the one hand and local taxation and provision of infrastructure on the other hand. Private companies on the verge of insolvency due to harsh settlement terms on their outstanding foreign debt would have paid less taxes, putting local public budgets under stress. The empirical findings in the existing literature are inconclusive as to whether high taxation independently deters foreign investors, especially with respect to locational choice within countries (Nielsen et al. 2017, 73). Other factors can mitigate the impact of taxes. Brülhart et al. (2012) shows that local industry agglomeration mitigates the effects of local tax differentials on (domestic and foreign) start-up investments in Switzerland. Agglomeration effects in general are a frequent topic in the literature and are key to understanding the geographical distribution of Foreign Direct Investment within countries, as shown for example by Guimaraes and Figueiredo (2000) for the case of Portugal. A specific form of local agglomeration comes in the form of the historical concentration of foreign-owned companies in particular locations within host countries.

Table 22: Geographical distribution of post-war investment and outstanding pre-war debt.

Approved equity capital investment projects, financed with new capital (acquired *Sperrmark* or foreign exchange), July 1950 – March 1955

Approved loan projects, financed with new capital (acquired *Sperrmark* or foreign exchange), July 1950 – December 1953



Level of outstanding foreign indebtedness, as of September 1950 (official census data)

Bonded municipal foreign debt from the interwar era, if not redeemed completely before the outbreak of War

Source: Shapefile from MPIDR [Max Planck Institute for Demographic Research] and CGG [Chair for Geodesy and Geoinformatics, University of Rostock]; 2011: MPIDR Population History GIS Collection (partly based on Bundesamt für Kartographie und Geodäsie 2011) – Rostock.

A number of studies such as Mariotti and Piscitello (1995) or more recently Li & Yao (2010) have found that such concentration has a positive effect on subsequent foreign investment. There exists thus a theoretical case of how outstanding foreign debt might have influenced foreign investment decisions negatively on the local level. By implication, the removal of the accompanying solvency risk through a definitive debt settlement should have increased investment in indebted localities relative to their debt-free neighbours, if such risk was present in the first place. The size and significance of this influence, however, is an open, empirical question, as other factors might have mitigated the effects of pre-war indebtedness.

I address this question for the case of post-war Germany empirically by estimating a series of difference-in-differences regressions, in which the treatment group is defined by districts with any outstanding pre-war debt in 1950. Thus, I only use the two data sets on local outstanding pre-war debt at the extensive margin, for the various reasons outlined above. Nevertheless, Table 22 compares the geographical distribution of post-war Foreign Direct Investment across German districts with the two measures at the intensive margin. At first glance, both post-war investment and pre-war debt concentrate in the traditional economic centres of Germany. Hamburg, the lower Rhine area, Frankfurt and Munich stand out as important debtors as well as important recipient of equity investment and loans from abroad. Otherwise, foreign direct investment is dense in South-West Germany. Much of the latter originated in Switzerland, pointing to the importance of the relative distance of investment locations to the home country. Direct loans are more spread out across Germany then equity investments, indicating a possibly more important role of agglomeration effects for the latter. As discussed already, the districts with outstanding bonded pre-war debt are much fewer than those with any pre-war debt according to the Central Bank census. Among all 466 consolidated German districts used for estimation purposes in this paper[147] there are 201 districts with any census pre-war debt and only 26 districts with bonded debt. For estimation purposes, I also exclude the largest one percent of investment projects measured by the amounts invested. In this way, I control for the fact that the post-war FDI data represent firm-level rather than plant-level data, which introduces a potential bias into their geographical distribution. The possibility of more than one plant per firm can be ruled out for the large majority of cases, given the preponderance of small investment projects. Large multinationals, however, typically had more than one plant in West Germany and constitute the few, very large cases in the data.

[147] The total number of West German districts was 557 at the time, which comprised both cities that were their own district (*kreisfreie Städte*) and districts containing several municipalities (*Landkreise*). The surrounding rural areas of *kreisfreie Städte* were often organized as their own *Landkreise*. To address this problem I merge all *kreisfreie Städte* and *Landkreise* for which the administrative seat of the *Landkreis* is the *kreisfreie Stadt*. The total number of districts is thus reduced to 466; For details see Appendix J.

The baseline difference-in-differences estimation model is given by

$$FDI_{i,t} = \beta_0 + \beta_1 Cum\_all_{i,t-1} + \beta_2 Cum\_nb\_all_{i,t-1} + \beta_3 LDA_t + \beta_4 Any\_pwd_i + \beta_5 LDA_t \cdot Any\_pwd_i + u_{i,t} \quad (8)$$

where $FDI_{i,t}$, $LDA_t = \begin{cases} 1, & if\ t \geq 2q53 \\ 0, & if\ t < 2q53 \end{cases}$ and $Any\_pwd_i = \begin{cases} 1, & if\ pwd_i > 0 \\ 0, & if\ pwd_i = 0 \end{cases}$

give the amount of money invested in district i in quarter t, the period following the conclusion of the London Debt Agreement in February 1953 and the districts with any outstanding pre-war debt (pwd_i) respectively. $LDA_t \cdot Any\_pwd_i$ denotes the interaction term measuring the differential impact of the debt settlement on the districts according to the incidence of pre-war debt. Besides these basic variables, I control for post-war FDI agglomeration in two ways: $Cum\_all_{i,t-1}$ measures the cumulative sum of FDI invested in district i since June 1950, up to the previous quarter $(t-1)$. The observed local concentration of post-war FDI in Table 22 could reflect chain investment in particular districts, in the sense that investors follow the example of earlier post-war investors in their locational choices. Similarly, $Cum\_nb\_all_{i,t-1}$ measures the cumulative sum of FDI invested since June 1950 and up to the previous quarter $(t-1)$, in all districts bordering on district i, thus controlling for the potential presence of spatial correlation in the FDI data.

Besides the two distinct measures for outstanding pre-war debt, I distinguish estimated models along several dimensions: Specifying panel regressions in terms of amounts invested introduces a currency problem to the measurement of post-war FDI. The records of the investment commission give amounts invested in *Deutschmark*. Therefore, the conservative strategy would be to stick with the records and measure amounts invested also in *Deutschmark* in the panel. However, *Deutschmark* clearly became more expensive over time from the point of view of the investor, as the *Sperrmark* discount declined after mid-1953. In this way, an equal amount of foreign currency invested results in less *Deutschmark* along the time dimension of the panel. To control for this potential distortion, I estimate all regressions both in *Deutschmark* and in Swiss *Francs*. For that purpose, I convert *Deutschmark* values into Swiss *Francs* by quarterly averages of the *Sperrmark* and *Deutschmark* exchange rate respectively, depending on the type of funds employed[148]. The choice of Swiss *Francs* is motivated by the central role played by Switzerland in the *Sperrmark* market, and by the stable currency parities during the first half of the 1950s that render consideration of the actual national currencies of investors unnecessary. In addition, the effect of the debt settlement could be different according to whether investment occurred in the form of equity capital or lending.

[148] For details on the conversion method and the corresponding exchange rates used, see Appendix G.

A priori, it is reasonable to expect lending to have been more sensitive to a debt settlement than equity investments. Therefore, I estimate all regressions separately for equity investments and lending. As discussed above, the observation period is shorter for loans, ending already in December 1953, while it extends to the first quarter of 1955 for equity investments. The greater sensitivity of lending to the London Agreement should be especially pronounced if the creditor was not at the same time also a shareholder in the debtor company, as the distinction between equity and lending is fluid in case of loans by foreign parent companies. To control for this distinction, I estimate all regressions separately for established pre-war investors and new, post-war entrants. Even though new entrants might have established a company in Germany after June 1950 and subsequently lent to it, they chose their investment location during the post-war observation period. In contrast, pre-war investors had already made their location decision before the War. As they typically invested in their own, existing subsidiaries during the post-war period, their geographical pattern of investment should have been less prone to change as a result of the London Agreement. Finally, I estimate the baseline model with district-fixed effects. However, I additionally estimate an extended model with random effects in order to capture the influence of time-invariant covariates. Regression results presented in Tables 23 to 28 are based on all FDI projects that were approved by the investment commission and financed with new capital, i.e. either acquired *Sperrmark* or foreign exchange. I exclude reinvested capital in order to restrict the estimation sample to projects that required the investment of truly additional foreign capital of the non-resident investor. Moreover, Tables B.5 to B.10 of Appendix B give the equivalent regression results for the full sample of both approved and rejected projects.

Table 23 and Table 26 give the results for the fixed-effects baseline model for equity investments and lending respectively. Regardless of the sample and the pre-war debt measure considered, the conclusion of the London Debt Agreement did not have a significant, differential impact on the amounts invested across districts according to whether districts contained any outstanding pre-war debt. Including rejected projects for the regression results presented in Table B.5 and Table B.8 does not change this conclusion, as the interaction terms are never significant either. On the other hand, Table 23 shows that the amount of earlier post-war investment in the same district did have a positive and strongly significant effect on current equity investment. This finding reveals important geographical agglomeration effects within post-war equity investment itself. At the same time, earlier post-war investment in neighbouring districts does not have any significant effect. In fact, prominent investment locations like Hamburg and Munich received large amounts of capital, while their surrounding regions hosted virtually no post-war FDI during the period.

This likely confounds the impact of regional investment clusters in the Lower Rhine area and in South-West Germany. In contrast, Table 26 shows a markedly different picture for lending projects. Considering all creditors, previous foreign lending to the same district actually had a significantly negative impact on current lending, while this effect vanishes once the sample is restricted to new post-war entrants. It also disappears for the sample including all creditors once the models are estimated with random effects in Table 27, which points to the influence of individual outlier values. At the same time, the significance pattern of the fixed-effects model is reproduced by the random-effects model for the case of equity investments in Table 24. The results of the random-effects regressions for equity projects also reveal the important role for post-war investment played by the historical concentration of foreigners in general, and foreign-owned companies specifically. $Freq\_prewar\_FDI_i$ gives the number of companies for each district i which had been foreign-owned since before the War according to Deutsches Wirtschaftsinstitut (1951)[149]. Similarly, $Freq\_diplo_i$ represents the number of official foreign representations such as consulates or commercial attachés for each district i as of 1951, according to Berliner Bank (1951). In fact, the incidence of such representations in 1951 is highly correlated with the distribution of foreign nationals across 36 major West German cities in 1933[150]. Table 24 reveals the highly positive and significant effect of both dimensions of the historical agglomeration of foreigners on the amounts of new equity capital invested during the first half of the 1950s, while the same effect can be observed somewhat less significantly for lending projects in Table 27. Overall, results obtained for the amounts converted into Swiss *Francs* are identical to the results for *Deutschmark* amounts. Thus, the permanent appreciation of *Sperrmark* after mid-1953 does not affect the observed regional distribution of amounts invested. Moreover, random-effects specifications confirm the main result of the fixed-effects models: Outstanding pre-war debt did not represent a solvency risk for German debtors. If it had done, its settlement in the London Debt Agreement should have given rise to a differential increase of FDI into indebted relative to debt-free districts. This was clearly not the case, however, as confirmed by a multitude of different model specifications.

[149] For details see Appendix I.

[150] The 1933 population data can be found in Statistisches Reichsamt (1936b). The correlation coefficient lies between 60% and 65%, depending on the scope of foreign nationals considered.

Conclusion

This paper discusses the benefits of the London Debt Agreement for the German economy during the first half of the 1950s, with a focus on its role for German creditworthiness abroad. The Agreement is commonly credited with restoring Germany's access to international capital markets, both in terms of short-term commercial credit and long-term investment capital. Available aggregate data indeed suggest such positive effects. The successful conclusion of the Debt Agreement likely represented an important condition for normalizing Germany's financial relations with the rest of the world economy. At the same time, based on extensive micro-level evidence I conclude that its impact on contemporary foreign investment into Germany was much more modest than frequently suggested by the literature. A structural break analysis of daily *Sperrmark* prices in Zurich shows that the Agreement did not have an independent effect of its own on foreign willingness to invest. Renewed convertibility of current investment returns was more directly responsible for the disappearance of the discount on *Sperrmark*, while the political conditionality between the London Agreement and convertibility provides for the intermediate influence of the latter. Moreover, a range of difference-in-differences models based on a panel of FDI across German districts show that outstanding pre-war debt did not determine foreign investment decisions two decades after Germany's default of the early 1930s. The local presence of outstanding debt did not deter investors from any particular investment location in the first place, nor did its settlement in the London Debt Agreement give rise to a differential increase of FDI into debtor districts. This finding indicates in turn that any potentially negative effect of outstanding debt on post-war investment did at least not materialize in the form of solvency risk for the indebted German investment destination. The estimations also show that more fundamental economic factors than Germany's default history determined the pattern of foreign investment in the early post-war period.

Table 23: Fixed-effects model – approved equity investment projects, 3q1950-1q1955.

in *Deutschmark*

Pre-war debt measure	Bank deutscher Länder		Glasemann (1993)	
	(1)	(2)	(3)	(4)
Investor sample	All	New entrants	All	New entrants
$Cum\_all\_ap_{i,t-1}$	0.015***	0.020***	0.014**	0.018***
	(0.005)	(0.006)	(0.007)	(0.006)
$Cum\_nb\_all\_ap_{i,t-1}$	0.001	0.001	0.001	0.001
	(0.001)	(0.001)	(0.001)	(0.001)
LDA_Feb53_t	846.9	666.4	862.3	-770.5
	(1,400)	(1,225)	(1,433)	(1,217)
$Any\_pwd_i \cdot LDA\_Feb53_t$	1,976	-1,585	18,546	17,731
	(3,764)	(2,760)	(20,043)	(13,901)
$Constant_i$	14,831***	10,469***	14,899***	10,554***
	(794.4)	(924.5)	(815.6)	(921.0)
Observations	8,388	8,388	8,388	8,388
Number of districts	466	466	466	466
R-squared	0.635	0.570	0.635	0.570

Standard errors clustered at the district level; *** p<0.01, ** p<0.05, * p<0.1

in *Swiss Francs*

Pre-war debt measure	Bank deutscher Länder		Glasemann (1993)	
	(5)	(6)	(7)	(8)
Investor sample	All	New entrants	All	New entrants
$Cum\_all\_ap_{i,t-1}$	0.030***	0.044***	0.029***	0.042***
	(0.008)	(0.009)	(0.008)	(0.009)
$Cum\_nb\_all\_ap_{i,t-1}$	0.002	0.001	0.002	0.001
	(0.001)	(0.001)	(0.001)	(0.001)
LDA_Feb53_t	65.24	-249.7	780.5	-955.9
	(1,078)	(934.1)	(1,070)	(939.8)
$Any\_pwd_i \cdot LDA\_Feb53_t$	3,395	-248.4	16,090	13,782
	(2,618)	(2,000)	(13,618)	(8,905)
$Constant_i$	9,118***	5,238***	9,170***	5,302***
	(839.5)	(969.8)	(841.7)	(960.8)
Observations	8,388	8,388	8,388	8,388
Number of districts	466	466	466	466
R-squared	0.623	0.591	0.623	0.591

Standard errors clustered at the district level; *** p<0.01, ** p<0.05, * p<0.1

Table 24: Random-effects model – approved equity investment projects, in *Deutschmark*.

Period	3q1950 - 1q1955			
Pre-war debt measure	Bank deutscher Länder		Glasemann (1993)	
	(1)	(2)	(3)	(4)
Investor sample	All	New entrants	All	New entrants
$Cum\_all\_ap_{i,t-1}$	0.033***	0.032***	0.033***	0.032***
	(0.006)	(0.008)	(0.006)	(0.008)
$Cum\_nb\_all\_ap_{i,t-1}$	0.0002	0.0004	0.0002	0.0004
	(0.0004)	(0.0004)	(0.0004)	(0.0004)
Any_pwd_i	-1,935	-102.4	7,982	5,389
	(3,010)	(2,599)	(14,419)	(9,135)
LDA_Feb53_t	751.2	397.9	-134.0	-1,700
	(1,234)	(1,099)	(1,348)	(1,272)
$Any\_pwd_i \cdot LDA\_Feb53_t$	-3,567	-5,558*	-15,184	-6,431
	(3,282)	(2,994)	(17,622)	(14,336)
$Freq\_prewar\_FDI_i$	5,923***	1,996*	5,868***	1,988*
	(873.5)	(1,036)	(877.2)	(1,049)
$Freq\_diplo_i$	14,922***	16,132***	14,781***	16,098***
	(5,486)	(6,040)	(5,461)	(6,041)
$Closest\_border_i$	-14.27	-5.407	-14.56	-5.520
	(11.30)	(9.364)	(11.41)	(9.325)
$Rhine_i$	-1,352	-713.8	-2,465	-1,668
	(7,319)	(6,339)	(6,791)	(6,128)
$Seaport_i$	-21,069	-16,760*	-22,374	-18,193*
	(13,668)	(9,642)	(14,169)	(10,293)
$half\_mil_i$	19,434	26,383	18,995	24,899
	(34,466)	(32,750)	(34,642)	(32,123)
$retail\_1950\_pc_i$	-3,653	-1,751	-5,056	-2,913
	(3,504)	(3,000)	(3,477)	(3,047)
$ind\_1935\_pc_i$	5,766	6,131	4,760	5,385
	(5,116)	(4,123)	(4,433)	(3,569)
$Constant_i$	604.6	-1,279	1,044	-292.3
	(3,258)	(2,647)	(3,219)	(2,588)
Observations	8,388	8,388	8,388	8,388
Number of iddistrict	466	466	466	466
R-squared	0.604	0.535	0.604	0.535

Standard errors clustered at the district level

*** p<0.01, ** p<0.05, * p<0.1

Table 25: Random-effects model – approved equity investment projects, in Swiss *Francs*.

Period	3q1950 - 1q1955			
Pre-war debt measure	Bank deutscher Länder		Glasemann (1993)	
	(1)	(2)	(3)	(4)
Investor sample	All	New entrants	All	New entrants
$Cum\_all\_ap_{i,t-1}$	0.049***	0.053***	0.050***	0.053***
	(0.007)	(0.009)	(0.007)	(0.009)
$Cum\_nb\_all\_ap_{i,t-1}$	0.001	0.001	0.001	0.001
	(0.001)	(0.001)	(0.001)	(0.001)
Any_pwd_i	-2,527	-5.187	6,935	1,960
	(2,328)	(1,316)	(10,022)	(5,592)
LDA_Feb53_t	275.8	-306.2	359.2	-1,331
	(879.9)	(773.7)	(937.8)	(915.5)
$Any\_pwd_i \cdot LDA\_Feb53_t$	-764.5	-2,316	-10,294	627.2
	(2,415)	(2,065)	(13,713)	(9,114)
$Freq\_prewar\_FDI_i$	2,922***	234.5	2,876***	244.6
	(709.3)	(866.8)	(706.7)	(863.1)
$Freq\_diplo_i$	11,093***	10,975**	10,972***	10,990**
	(3,914)	(4,372)	(3,911)	(4,391)
$Closest\_border_i$	-8.065	0.395	-8.131	0.445
	(7.318)	(6.050)	(7.389)	(5.997)
$Rhine_i$	766.9	453.5	-240.3	-31.15
	(5,284)	(3,854)	(4,818)	(3,875)
$Seaport_i$	-18,254*	-12,015**	-19,610*	-12,930**
	(9,894)	(6,047)	(10,222)	(6,458)
$half\_mil_i$	33,340	15,792	31,885	14,391
	(27,307)	(18,170)	(27,276)	(17,457)
$retail\_1950\_pc_i$	-2,667	-666.6	-3,891	-1,232
	(2,446)	(1,967)	(2,502)	(1,996)
$ind\_1935\_pc_i$	6,105	3,289*	5,243	2,979**
	(4,369)	(1,692)	(3,707)	(1,498)
$Constant_i$	-870.7	-1,025	-855.7	-537.2
	(2,565)	(1,204)	(2,524)	(1,181)
Observations	8,388	8,388	8,388	8,388
Number of iddistrict	466	466	466	466
R-squared	0.595	0.567	0.595	0.567

Standard errors clustered at the district level

*** p<0.01, ** p<0.05, * p<0.1

Table 26: Fixed-effects model – approved lending projects, 3q1950-4q1953.

in *Deutschmark*

Pre-war debt measure	Bank deutscher Länder		Glasemann (1993)	
	(1)	(2)	(3)	(4)
Investor sample	All	New entrants	All	New entrants
$Cum\_all\_ap_{i,t-1}$	-0.018**	-0.014	-0.020***	-0.014
	(0.007)	(0.017)	(0.008)	(0.017)
$Cum\_nb\_all\_ap_{i,t-1}$	0.001*	0.001	0.002**	0.001
	(0.001)	(0.001)	(0.001)	(0.001)
LDA_Feb53_t	1,154	-3,163	458.9	-1,265
	(5,081)	(2,245)	(4,855)	(3,817)
$Any\_pwd_i \cdot LDA\_Feb53_t$	6,248	3,560	70,650	-8,484
	(11,337)	(8,416)	(54,183)	(36,202)
$Constant_i$	49,200***	34,558***	49,458***	34,498***
	(2,185)	(4,064)	(2,197)	(4,024)
Observations	6,058	6,058	6,058	6,058
Number of districts	466	466	466	466
R-squared	0.607	0.508	0.608	0.508

Standard errors clustered at the district level; *** p<0.01, ** p<0.05, * p<0.1

in *Swiss Francs*

Pre-war debt measure	Bank deutscher Länder		Glasemann (1993)	
	(5)	(6)	(7)	(8)
Investor sample	All	New entrants	All	New entrants
$Cum\_all\_ap_{i,t-1}$	-0.016**	-0.017	-0.018**	-0.016
	(0.007)	(0.012)	(0.007)	(0.012)
$Cum\_nb\_all\_ap_{i,t-1}$	0.002	0.002*	0.002*	0.002
	(0.001)	(0.001)	(0.001)	(0.001)
LDA_Feb53_t	553.0	-1,580	1,004	579.1
	(3,973)	(1,394)	(3,545)	(2,251)
$Any\_pwd_i \cdot LDA\_Feb53_t$	5,808	3,900	42,216	-10,978
	(7,139)	(5,163)	(28,683)	(20,181)
$Constant_i$	29,305***	20,769***	29,434***	20,700***
	(1,492)	(1,699)	(1,478)	(1,691)
Observations	6,058	6,058	6,058	6,058
Number of districts	466	466	466	466
R-squared	0.602	0.506	0.603	0.506

Standard errors clustered at the district level; *** p<0.01, ** p<0.05, * p<0.1

Table 27: Random-effects model – approved lending projects, in *Deutschmark*.

Period	3q1950 - 4q1953			
Pre-war debt measure	Bank deutscher Länder		Glasemann (1993)	
	(1)	(2)	(3)	(4)
Investor sample	All	New entrants	All	New entrants
$Cum\_all\_ap_{i,t-1}$	0.024	0.015	0.025	0.0165
	(0.015)	(0.018)	(0.016)	(0.0177)
$Cum\_nb\_all\_ap_{i,t-1}$	-0.0003	0.001	-0.0002	0.000402
	(0.001)	(0.001)	(0.001)	(0.000717)
Any_pwd_i	3,384	11,335**	38,685	32,964*
	(8,325)	(5,617)	(24,207)	(17,465)
LDA_Feb53_t	1,206	-3,725	-3,118	-4,359
	(4,957)	(2,478)	(4,925)	(4,022)
$Any\_pwd_i \cdot LDA\_Feb53_t$	-17,248	-12,726	-64,529	-100,245**
	(13,154)	(9,131)	(61,942)	(45,970)
$Freq\_prewar\_FDI_i$	8,911**	-1,104	8,829**	-1,247
	(3,806)	(3,902)	(3,724)	(3,807)
$Freq\_diplo_i$	57,920*	56,796**	57,439*	55,997**
	(30,623)	(23,990)	(30,493)	(23,709)
$Closest\_border_i$	-32.41	-19.32	-29.81	-16.60
	(40.01)	(30.32)	(40.00)	(29.79)
$Rhine_i$	3,799	-6,777	2,008	-4,830
	(24,478)	(18,531)	(23,913)	(18,771)
$Seaport_i$	-111,585**	-66,117**	-116,762**	-64,174*
	(55,099)	(33,566)	(57,788)	(35,010)
$half\_mil_i$	161,062	127,406*	144,242	118,411*
	(128,612)	(77,448)	(123,529)	(71,604)
$retail\_1950\_pc_i$	7,866	794.7	5,851	3,203
	(13,062)	(10,169)	(12,497)	(10,350)
$ind\_1935\_pc_i$	6,313	10,767	5,770	12,848**
	(11,069)	(6,577)	(9,680)	(6,026)
$Constant_i$	4,121	2,705	5,327	2,806
	(8,341)	(4,708)	(8,327)	(4,897)
Observations	6,058	6,058	6,058	6,058
Number of iddistrict	466	466	466	466
R-squared	0.527	0.417	0.528	0.418

Standard errors clustered at the district level

*** p<0.01, ** p<0.05, * p<0.1

Table 28: Random-effects model – approved lending projects, in Swiss *Francs*.

Period	3q1950 - 4q1953			
Pre-war debt measure	Bank deutscher Länder		Glasemann (1993)	
	(1)	(2)	(3)	(4)
Investor sample	All	New entrants	All	New entrants
$Cum\_all\_ap_{i,t-1}$	0.021	0.009	0.022	0.011
	(0.014)	(0.015)	(0.015)	(0.015)
$Cum\_nb\_all\_ap_{i,t-1}$	0.001	0.001	0.001	0.0004
	(0.001)	(0.001)	(0.001)	(0.001)
Any_pwd_i	-11.84	6,036*	19,726	17,969*
	(5,038)	(3,392)	(14,775)	(10,515)
LDA_Feb53_t	157.7	-1,746	-1,209	-795.3
	(3,912)	(1,460)	(3,502)	(2,357)
$Any\_pwd_i \cdot LDA\_Feb53_t$	-6,694	-4,544	-31,955	-60,422**
	(8,122)	(5,579)	(36,532)	(27,043)
$Freq\_prewar\_FDI_i$	6,825***	854.9	6,778***	756.2
	(1,945)	(2,084)	(1,906)	(2,034)
$Freq\_diplo_i$	31,840*	32,209**	31,583*	31,720**
	(17,290)	(13,366)	(17,182)	(13,156)
$Closest\_border_i$	-16.45	-13.85	-15.34	-12.49
	(24.08)	(17.08)	(24.10)	(16.77)
$Rhine_i$	4,305	-5,805	2,997	-4,527
	(14,543)	(10,543)	(14,126)	(10,645)
$Seaport_i$	-62,110*	-35,125*	-65,198*	-33,486
	(33,666)	(20,135)	(35,123)	(20,820)
$half\_mil_i$	93,187	69,451	84,606	65,428*
	(77,468)	(43,080)	(74,815)	(39,651)
$retail\_1950\_pc_i$	5,848	367.7	4,324	1,932
	(7,558)	(5,519)	(7,131)	(5,650)
$ind\_1935\_pc_i$	2,057	5,344	1,450	6,633*
	(6,588)	(3,932)	(5,745)	(3,560)
$Constant_i$	2,380	2,261	2,825	1,999
	(4,998)	(2,758)	(5,010)	(2,895)
Observations	6,058	6,058	6,058	6,058
Number of iddistrict	466	466	466	466
R-squared	0.530	0.425	0.531	0.427

Standard errors clustered at the district level

*** p<0.01, ** p<0.05, * p<0.1

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HABB *Bundesbank* Archives, Frankfurt/Main

NARA National Archives and Records Administration, College Park/Maryland.

IfZArch Institut für Zeitgeschichte, München

PA AA Politisches Archiv des Auswärtigen Amts, Berlin.

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Appendix A – Chapter Two

Table A.1: Timing of first investment: Poisson model, equity investment.

Period	3q50-1q55			
Sample	New capital		New and existing capital	
	(1)	(2)	(3)	(4)
prewar investor	-0.151***	-0.155***	-0.057*	-0.064*
	(0.044)	(0.045)	(0.032)	(0.033)
German origin	-0.055	-0.048	-0.089***	-0.084**
	(0.039)	(0.041)	(0.032)	(0.033)
Family	-0.019	-0.020	-0.015	-0.016
	(0.050)	(0.050)	(0.041)	(0.042)
Trustee	-0.020	0.032	-0.018	0.015
	(0.059)	(0.062)	(0.054)	(0.056)
No control		-0.083**		-0.059*
		(0.034)		(0.031)
WWII neutrals		-0.013		0.015
		(0.047)		(0.041)
Investment size		0.006		0.004
(million DM)		(0.007)		(0.008)
Switzerland		-0.008		-0.028
		(0.061)		(0.055)
Sector FE		YES		YES
Constant	2.429***	2.418***	2.399***	2.400***
	(0.012)	(0.029)	(0.012)	(0.026)
Observations	2,186	2,186	2,639	2,639
Wald chi2	14.50	83.09	14.30	68.63
Prob>chi2	0.006	0.000	0.006	0.000

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table A.1 is equivalent to Table 12 of Chapter Two. However, Table A.1 is based on both ultimately approved and ultimately rejected applications. Table 12 is based on ultimately approved applications only.

Table A.2: Timing of first investment: Poisson model, equity investment and lending.

Period	3q50-4q53			
Sample	New capital		New and existing capital	
	(1)	(2)	(3)	(4)
prewar investor	-0.174***	-0.198***	-0.115***	-0.131***
	(0.036)	(0.037)	(0.030)	(0.031)
German origin	0.046	0.031	-0.064**	-0.077***
	(0.029)	(0.032)	(0.026)	(0.028)
Family	0.006	0.011	0.033	0.034
	(0.026)	(0.026)	(0.025)	(0.025)
Trustee	-0.038	0.003	-0.013	0.017
	(0.040)	(0.042)	(0.039)	(0.041)
No control		-0.037		-0.017
		(0.030)		(0.028)
WWII neutrals		-0.048		0.004
		(0.040)		(0.038)
Investment size		0.012		0.008
(million DM)		(0.009)		(0.009)
Switzerland		-0.023		-0.059
		(0.052)		(0.049)
Sector FE		YES		YES
Constant	2.099***	2.124***	2.061***	2.087***
	(0.012)	(0.026)	(0.012)	(0.024)
Observations	2,741	2,741	3,331	3,331
Wald chi2	28.20	85.54	23.52	67.22
Prob>chi2	0.000	0.000	0.000	0.000

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table A.2 is equivalent to Table 13 of Chapter Two. However, Table A.2 is based on both ultimately approved and ultimately rejected applications. Table 13 is based on ultimately approved applications only.

Table A.3: Determinants of recurring investments: Conditional risk set model.

Period	3q1950-1q1955		3q1950 - 4q1953	
Sample	Equity investment		Equity investment and lending	
	(1)	(2)	(3)	(4)
Prewar investor	0.660***	0.671***	0.574***	0.507***
	(0.135)	(0.139)	(0.092)	(0.095)
German emigrant	-0.044	0.094	0.123	0.191
	(0.202)	(0.217)	(0.118)	(0.128)
Family	-0.511*	-0.507*	-0.267**	-0.254**
	(0.268)	(0.268)	(0.110)	(0.110)
Trustee	0.202	0.262	0.467***	0.456***
	(0.204)	(0.209)	(0.121)	(0.126)
No control	-0.086	-0.298	0.125	0.055
	(0.130)	(0.210)	(0.093)	(0.131)
WWII neutrals	0.546***	0.375*	0.346***	0.271
	(0.131)	(0.214)	(0.092)	(0.165)
Previous investment (million DM)	0.130	0.122	0.062***	0.061***
	(0.083)	(0.084)	(0.020)	(0.021)
Nominal capital of destination (million DM)	-0.054	-0.055	-0.014	-0.017
	(0.035)	(0.036)	(0.012)	(0.013)
Switzerland		0.340		0.138
		(0.313)		(0.212)
Sector FE		YES		YES
Observations	2,399	2,399	3,276	3,276
Subjects	2,052	2,052	2,555	2,555
Failures	378	378	804	804
Wald chi2	62.89	99.42	152.31	197.08
Prob>chi2	0.000	0.000	0.000	0.000

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table A.3 is equivalent to Table 14 of Chapter Two. However, Table A.3 is based on both ultimately approved and ultimately rejected applications. Table 14 is based on ultimately approved applications only.

Table A.4: First location choice of new entrants: Alternative-specific conditional logit model.

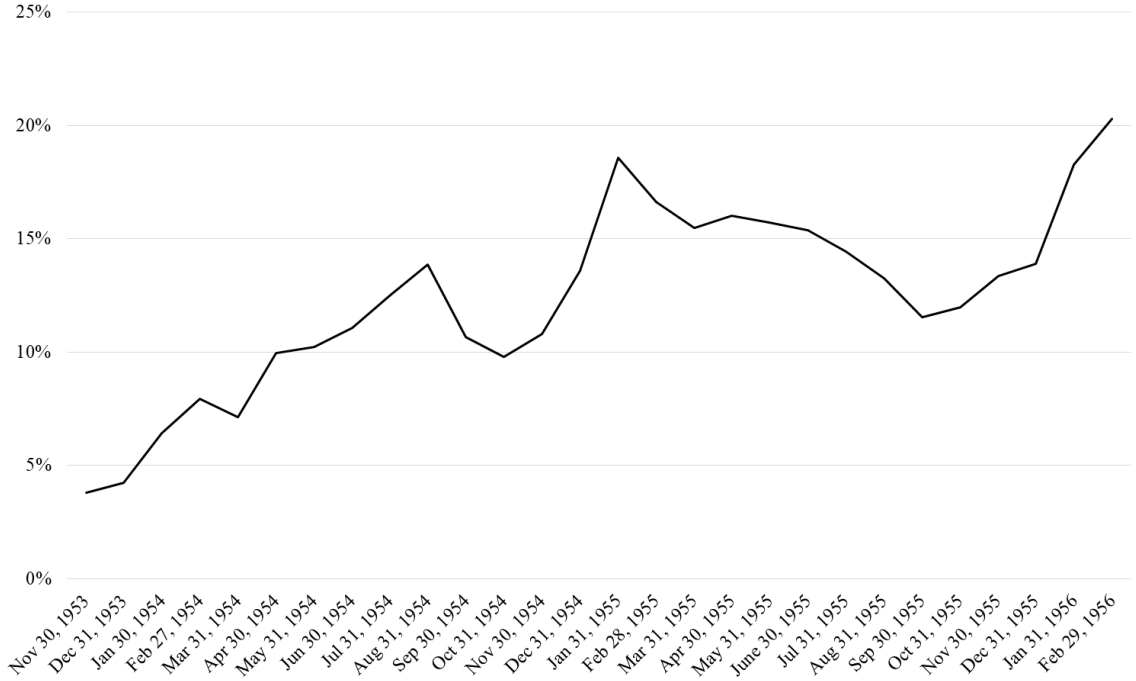
Period	3q1950 - 1q1955			3q1950 - 4q1953		
Investment sample	Equity investment			Equity investment and lending		
	(1)	(2)	(3)	(4)	(5)	(6)
Sectoral employment share	7.097***	7.723***	7.775***	6.967***	7.669***	7.731***
	(0.558)	(0.334)	(0.338)	(0.469)	(0.296)	(0.300)
Distance to border	-6.591***	-7.810***	-7.792***	-5.365***	-6.664***	-6.638***
	(0.319)	(0.312)	(0.312)	(0.251)	(0.237)	(0.237)
Own occupation zone	0.621***	0.643***	0.639***	0.754***	0.920***	0.910***
	(0.097)	(0.101)	(0.100)	(0.088)	(0.090)	(0.090)
Own consulate	0.499***	1.464***	1.513***	0.306***	1.063***	1.120***
	(0.105)	(0.127)	(0.128)	(0.099)	(0.105)	(0.109)
Foreign-owned companies		0.014***	0.014***		0.012***	0.012***
		(0.003)	(0.003)		(0.002)	(0.002)
P.c. retail turnover 1950		0.324***			0.414***	
		(0.067)			(0.046)	
P.c. industry turnover 1935			0.041			0.053
			(0.036)			(0.033)
Population density 1950		0.0003***	0.0003***		0.0002***	0.0003***
		(0.000)	(0.000)		(0.000)	(0.000)
Large city 1950 (>500,000)		1.479***	1.541***		1.656***	1.734***
		(0.147)	(0.148)		(0.119)	(0.120)
Seaport		-0.125	-0.149		0.289*	0.273
		(0.244)	(0.250)		(0.172)	(0.175)
Rhine		0.772***	0.804***		0.567***	0.605***
		(0.0751)	(0.080)		(0.066)	(0.070)
Hamburg-Frankfurt		1.048***	1.127***		0.820***	0.924***
		(0.135)	(0.145)		(0.120)	(0.129)
District FE	YES			YES		
Observations	929,670	929,670	929,670	1,151,952	1,151,952	1,151,952
Wald chi2	670.5	11,360.69	11,191.25	763.26	13,331.77	13,137.83
Prob > chi2	0.000	0.000	0.000	0.000	0.000	0.000

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table A.4 is equivalent to Table 16 of Chapter Two. However, Table A.4 is based on both ultimately approved and ultimately rejected applications. Table 16 is based on ultimately approved applications only.

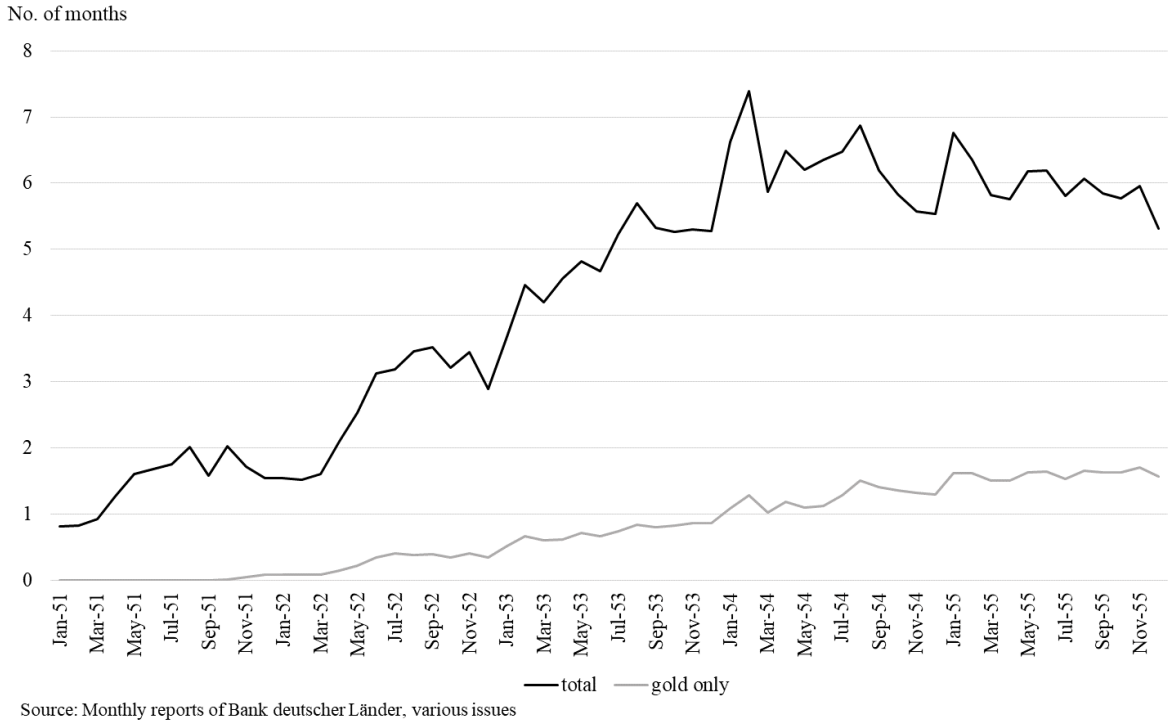
Appendix B – Chapter Three

Table B.1: Ratio of short-term, foreign commercial credit lines of German banks to the total value of German imports, November 1953 to February 1956.



Sources: Monthly reports of Bank deutscher Länder, various issues (Imports); Appendices of Minutes of Meetings of the Central Bank Council of the Bank deutscher Länder between 1954 and 1956, various meetings, starting with the 174th meeting on August 11, 1954 (HADB B 330/79/1) (Credit lines).

Table B.2: Number of months of the total value of German imports covered by German currency reserves, January 1951 to December 1955.



Source: Monthly reports of Bank deutscher Länder, various issues

Table B.3: Acquired *Sperrmark* turnover, total amount traded and as percent of the level of acquired *Sperrmark* at the end of the previous month.

month	million DM	% of end of previous month level	month	million DM	% of end of previous month level	month	million DM	% of end of previous month level
Oct 51	144	133,3%	Jul 52	161	83,0%	Apr 53	174.8	77,8%
Nov 51	111	82,2%	Aug 52	152	80,4%	May 53	107	41,8%
Dec 51	115	86,5%	Sep 52	165	82,1%	Jun 53	198.2	75,9%
Jan 52	133	96,1%	Oct 52	143		Jul 53	138.7	52,4%
Feb 52			Nov 52	120	65,6%	Aug 53	265.6	94,3%
Mar 52	114	69,9%	Dec 52	112	60,9%	Sep 53	247.1	90,9%
Apr 52			Jan 53	99.4	53,8%	Oct 53	210.6	82,0%
May 52			Feb 53	119.3	59,4%	Nov 53	214.9	83,7%
Jun 52	124		Mar 53	173.7	78,4%			

Source: Bundesbank Archive, Appendices of Minutes of Meetings of the Central Bank Council of the Bank deutscher Länder, various meetings between 1952 and 1954. The data is missing for February, April and May 1952.

Table B.4: Sales of original *Sperrmark* as a source of supply for acquired *Sperrmark*, total amount sold and as percent of the level of acquired *Sperrmark* at the end of the month.

month	million DM	% of end of month level	month	million DM	% of end of month level	month	million DM	% of end of month level
Oct 51	41	30,4%	Jul 52	32	16,9%	Apr 53	47.3	18,5%
Nov 51	23	17,3%	Aug 52	25	12,4%	May 53	22.5	8,6%
Dec 51	24	17,3%	Sep 52	30		Jun 53	37.2	14,0%
Jan 52	29	19,6%	Oct 52	29	15,8%	Jul 53	37.2	13,2%
Feb 52			Nov 52	24	13,0%	Aug 53	29.4	10,8%
Mar 52	24	14,3%	Dec 52	21	11,4%	Sep 53	27.4	10,7%
Apr 52			Jan 53	30.8	15,3%	Oct 53	31.8	12,4%
May 52			Feb 53	32.7	14,8%	Nov 53	56.1	19,8%
Jun 52	26	13,4%	Mar 53	26.6	11,8%			

Source: Bundesbank Archive, Appendices of Minutes of Meetings of the Central Bank Council of the Bank deutscher Länder, various meetings between 1952 and 1954. The data is missing for February, April and May 1952.

Tables B.5 to B.10 are equivalent to Tables 23 to 28 of Chapter Three. However, they are based on both ultimately approved and ultimately rejected applications. Tables 23 to 28 are based on ultimately approved applications only.

Table B.5: Fixed-effects model – equity investment projects, 3q1950-1q1955.

in *Deutschmark*

Pre-war debt measure	Bank deutscher Länder		Glasemann (1993)	
	(1)	(2)	(3)	(4)
Investor sample	All	New entrants	All	New entrants
$Cum\_all_{i,t-1}$	0.015***	0.018***	0.014**	0.017***
	(0.006)	(0.005)	(0.007)	(0.006)
$Cum\_nb\_all_{i,t-1}$	0.001	0.001	0.001	0.001
	(0.001)	(0.001)	(0.001)	(0.001)
LDA_Feb53_t	937.1	727.3	900.0	-708.6
	(1,439)	(1,276)	(1,459)	(1,239)
$Any\_pwd_i \cdot LDA\_Feb53_t$	1,453	-2,248	14,772	11,363
	(3,689)	(2,866)	(18,191)	(14,506)
$Constant_i$	15,620***	11,320***	15,676***	11,382***
	(817.4)	(892.9)	(845.8)	(894.3)
Observations	8,388	8,388	8,388	8,388
Number of districts	466	466	466	466
R-squared	0.655	0.581	0.655	0.581

Standard errors clustered at the district level; *** p<0.01, ** p<0.05, * p<0.1

in *Swiss Francs*

Pre-war debt measure	Bank deutscher Länder		Glasemann (1993)	
	(5)	(6)	(7)	(8)
Investor sample	All	New entrants	All	New entrants
$Cum\_all_{i,t-1}$	0.029***	0.040***	0.028***	0.039***
	(0.006)	(0.008)	(0.007)	(0.008)
$Cum\_nb\_all_{i,t-1}$	0.001	0.001	0.001	0.001
	(0.001)	(0.001)	(0.001)	(0.001)
LDA_Feb53_t	126.6	-213.5	863.8	-867.0
	(1,080)	(939.9)	(1,066)	(933.2)
$Any\_pwd_i \cdot LDA\_Feb53_t$	3,224	-557.2	13,982	9,620
	(2,569)	(2,051)	(12,160)	(9,101)
$Constant_i$	9,685***	5,846***	9,729***	5,893***
	(763.8)	(922.2)	(776.0)	(917.7)
Observations	8,388	8,388	8,388	8,388
Number of districts	466	466	466	466
R-squared	0.644	0.602	0.644	0.602

Standard errors clustered at the district level; *** p<0.01, ** p<0.05, * p<0.1

Table B.6: Random-effects model – equity investment projects, in *Deutschmark*.

Period	3q1950 - 1q1955			
Pre-war debt measure	Bank deutscher Länder		Glasemann (1993)	
	(1)	(2)	(3)	(4)
Investor sample	All	New entrants	All	New entrants
$Cum\_all_{i,t-1}$	0.032***	0.030***	0.033***	0.031***
	(0.005)	(0.008)	(0.006)	(0.008)
$Cum\_nb\_all_{i,t-1}$	0.0002	0.0004	0.0002	0.0004
	(0.0004)	(0.0004)	(0.0004)	(0.0004)
Any_pwd_i	-1,662	271.7	9,664	9,192
	(3,090)	(2,745)	(14,661)	(9,998)
LDA_Feb53_t	807.3	469.0	-142.9	-1,660
	(1,276)	1,153)	(1,376)	(1,303)
$Any\_pwd_i \cdot LDA\_Feb53_t$	-4,172	-6,407**	-19,498	-13,895
	(3,356)	(3,164)	(17,240)	(15,789)
$Freq\_prewar\_FDI_i$	6,233***	1,993*	6,161***	1,954*
	(864.5)	(1,090)	(876.2)	(1,108)
$Freq\_diplo_i$	15,786***	17,302***	15,608***	17,200***
	(5,884)	(6,566)	(5,838)	(6,531)
$Closest\_border_i$	-15.03	-6.371	-15.30	-6.370
	(11.63)	(9.904)	(11.75)	(9.844)
$Rhine_i$	-2,072	-622.7	-3,144	-1,578
	(7,643)	(6,760)	(7,085)	(6,493)
$Seaport_i$	-23,224	-19,523*	-24,405	-20,992*
	(14,999)	(10,783)	(15,453)	(11,422)
$half\_mil_i$	21,128	33,413	20,823	31,635
	(36,394)	(34,373)	(36,392)	(33,576)
$retail\_1950\_pc_i$	-3,822	-1,787	-5,201	-2,973
	(3,682)	(3,224)	(3,636)	(3,248)
$ind\_1935\_pc_i$	5,729	6,701	4,723	5,937
	(5,329)	(4,439)	(4,599)	(3,815)
$Constant_i$	802.2	-1,371	1,266	-368.5
	(3,389)	(2,833)	(3,356)	(2,765)
Observations	8,388	8,388	8,388	8,388
Number of iddistrict	466	466	466	466
R-squared	0.624	0.543	0.624	0.543

Standard errors clustered at the district level

*** p<0.01, ** p<0.05, * p<0.1

Table B.7: Random-effects model – equity investment projects, in Swiss *Francs*.

Period	3q1950 - 1q1955			
Pre-war debt measure	Bank deutscher Länder		Glasemann (1993)	
	(1)	(2)	(3)	(4)
Investor sample	All	New entrants	All	New entrants
$Cum\_all_{i,t-1}$	0.047***	0.050***	0.048***	0.050***
	(0.006)	(0.009)	(0.006)	(0.009)
$Cum\_nb\_all_{i,t-1}$	0.001	0.001	0.001	0.001
	(0.001)	(0.001)	(0.001)	(0.001)
Any_pwd_i	-2,453	152.4	8,008	4,753
	(2,406)	(1,411)	(10,070)	(6,081)
LDA_Feb53_t	297.8	-274.8	384.5	-1,288
	(888.7)	(786.6)	(944.6)	(924.5)
$Any\_pwd_i \cdot LDA\_Feb53_t$	-1,049	-2,863	-13,076	-4,913
	(2,451)	(2,152)	(13,068)	(9,617)
$Freq\_prewar\_FDI_i$	3,114***	194.1	3,058***	181.7
	(700.7)	(895.6)	(704.5)	(896.9)
$Freq\_diplo_i$	11,834***	11,900**	11,686***	11,863**
	(4,262)	(4,822)	(4,245)	(4,815)
$Closest\_border_i$	-8.613	-0.234	-8.676	-0.108
	(7.570)	(6.425)	(7.641)	(6.361)
$Rhine_i$	415.3	703.2	-578.7	193.5
	(5,551)	(4,178)	(5,065)	(4,163)
$Seaport_i$	-19,745*	-13,836**	-21,024*	-14,787**
	(10,812)	(6,776)	(11,110)	(7,199)
$half\_mil_i$	34,393	20,534	33,014	18,869
	(28,776)	(19,647)	(28,597)	(18,795)
$retail\_1950\_pc_i$	-2,850	-755.4	-4,076	-1,361
	(2,579)	(2,130)	(2,629)	(2,149)
$ind\_1935\_pc_i$	6,169	3,806**	5,290	3,451**
	(4,541)	(1,932)	(3,846)	(1,683)
$Constant_i$	-732.6	-1,110	-720.6	-622.8
	(2,673)	(1,349)	(2,632)	(1,308)
Observations	8,388	8,388	8,388	8,388
Number of iddistrict	466	466	466	466
R-squared	0.616	0.575	0.616	0.575

Standard errors clustered at the district level

*** p<0.01, ** p<0.05, * p<0.1

Table B.8: Fixed-effects model – lending projects, 3q1950-4q1953.

in *Deutschmark*

Pre-war debt measure	Bank deutscher Länder		Glasemann (1993)	
	(1)	(2)	(3)	(4)
Investor sample	All	New entrants	All	New entrants
$Cum\_all_{i,t-1}$	-0.018***	-0.017	-0.019***	-0.016
	(0.005)	(0.014)	(0.005)	(0.014)
$Cum\_nb\_all_{i,t-1}$	0.001*	0.001	0.001*	0.001
	(0.001)	(0.001)	(0.001)	(0.001)
LDA_Feb53_t	1,583	-2,680	815.2	-984.2
	(5,282)	(2,654)	(4,916)	(3,837)
$Any\_pwd_i \cdot LDA\_Feb53_t$	1,488	38.55	29,654	-35,628
	(10,704)	(8,751)	(45,184)	(44,088)
$Constant_i$	55,478***	40,865***	55,594***	40,716***
	(2,004)	(3,848)	(1,996)	(3,787)
Observations	6,058	6,058	6,058	6,058
Number of districts	466	466	466	466
R-squared	0.627	0.544	0.627	0.544

Standard errors clustered at the district level; *** p<0.01, ** p<0.05, * p<0.1

in *Swiss Francs*

Pre-war debt measure	Bank deutscher Länder		Glasemann (1993)	
	(5)	(6)	(7)	(8)
Investor sample	All	New entrants	All	New entrants
$Cum\_all_{i,t-1}$	-0.015**	-0.019*	-0.016**	-0.017*
	(0.007)	(0.010)	(0.007)	(0.010)
$Cum\_nb\_all_{i,t-1}$	0.002	0.001	0.002	0.001
	(0.001)	(0.001)	(0.001)	(0.001)
LDA_Feb53_t	795.8	-1,208	1,264	802.5
	(4,127)	(1,679)	(3,644)	(2,309)
$Any\_pwd_i \cdot LDA\_Feb53_t$	2,877	1,605	15,831	-28,189
	(7,041)	(5,586)	(25,442)	(27,351)
$Constant_i$	32,923***	24,458***	32,969***	24,341***
	(1,562)	(1,607)	(1,555)	(1,589)
Observations	6,058	6,058	6,058	6,058
Number of districts	466	466	466	466
R-squared	0.623	0.545	0.623	0.545

Standard errors clustered at the district level; *** p<0.01, ** p<0.05, * p<0.1

Table B.9: Random-effects model – lending projects, in *Deutschmark*.

Period	3q1950 - 4q1953			
Pre-war debt measure	Bank deutscher Länder		Glasemann (1993)	
	(1)	(2)	(3)	(4)
Investor sample	All	New entrants	All	New entrants
$Cum\_all_{i,t-1}$	0.018	0.009	0.019	0.011
	(0.014)	(0.0170)	(0.015)	(0.017)
$Cum\_nb\_all_{i,t-1}$	-0.0003	0.0004	-0.0003	0.0003
	(0.0006)	(0.0006)	(0.0006)	(0.0006)
Any_pwd_i	6,469	14,411**	55,863**	50,174**
	(9,525)	(7,100)	(27,279)	(23,644)
LDA_Feb53_t	1,753	-3,187	-2,505	-4,075
	(5,183)	(2,842)	(5,052)	(4,165)
$Any\_pwd_i \cdot LDA\_Feb53_t$	-21,524*	-16,941*	-104,935*	-133,440**
	(12,668)	(9,949)	(60,657)	(58,022)
$Freq\_prewar\_FDI_i$	12,075***	1,538	11,913***	1,314
	(3,815)	(3,996)	(3,705)	(3,875)
$Freq\_diplo_i$	64,400**	63,609**	63,582**	62,524**
	(32,005)	(26,070)	(31,669)	(25,621)
$Closest\_border_i$	-54.50	-38.87	-50.44	-34.49
	(43.28)	(34.99)	(42.99)	(33.95)
$Rhine_i$	-5,864	-16,001	-7,445	-13,922
	(25,890)	(20,443)	(25,230)	(20,558)
$Seaport_i$	-125,173**	-79,963**	-130,905**	-79,096**
	(60,229)	(37,158)	(62,440)	(38,866)
$half\_mil_i$	157,351	130,375	134,678	114,640
	(133,875)	(97,372)	(128,258)	(89,842)
$retail\_1950\_pc_i$	2,995	-3,697	1,214	-1,160
	(13,259)	(11,555)	(12,949)	(11,475)
$ind\_1935\_pc_i$	4,119	8,757	4,036	11,289
	(12,893)	(8,044)	(11,148)	(7,165)
$Constant_i$	10,427	8,586	11,589	8,725
	(9,000)	(6,049)	(8,951)	(6,110)
Observations	6,058	6,058	6,058	6,058
Number of iddistrict	466	466	466	466
R-squared	0.555	0.456	0.556	0.458

Standard errors clustered at the district level

*** p<0.01, ** p<0.05, * p<0.1

Table B.10: Random-effects model – lending projects, in Swiss *Francs*.

Period	3q1950 - 4q1953			
Pre-war debt measure	Bank deutscher Länder		Glasemann (1993)	
	(1)	(2)	(3)	(4)
Investor sample	All	New entrants	All	New entrants
$Cum\_all_{i,t-1}$	0.016	0.004	0.018	0.007
	(0.013)	(0.014)	(0.013)	(0.014)
$Cum\_nb\_all_{i,t-1}$	0.001	0.0004	0.001	0.0003
	(0.001)	(0.001)	(0.001)	(0.001)
Any_pwd_i	1,918	7,952*	30,275*	28,446**
	(5,708)	(4,281)	(16,453)	(14,136)
LDA_Feb53_t	446.8	-1,391	-840.8	-644.3
	(4,042)	(1,716)	(3,578)	(2,448)
$Any\_pwd_i \cdot LDA\_Feb53_t$	-9,315	-7,236	-57,454	-80,706**
	(7,874)	(6,079)	(35,770)	(34,783)
$Freq\_prewar\_FDI_i$	8,722***	2,468	8,623***	2,317
	(1,926)	(2,109)	(1,870)	(2,047)
$Freq\_diplo_i$	35,363**	35,997**	34,901**	35,340**
	(17,853)	(14,406)	(17,620)	(14,097)
$Closest\_border_i$	-29.95	-25.99	-27.98	-23.64
	(25.79)	(19.83)	(25.66)	(19.23)
$Rhine_i$	-1,658	-11,601	-2,819	-10,232
	(15,253)	(11,660)	(14,775)	(11,679)
$Seaport_i$	-69,503*	-42,836*	-72,886*	-41,856*
	(36,661)	(22,150)	(37,824)	(23,005)
$half\_mil_i$	89,791	69,965	77,761	61,901
	(80,065)	(55,454)	(77,135)	(51,130)
$retail\_1950\_pc_i$	2,819	-2,499	1,463	-848.9
	(7,571)	(6,375)	(7,343)	(6,337)
$ind\_1935\_pc_i$	624.9	3,973	320.3	5,550
	(7,640)	(4,844)	(6,589)	(4,273)
$Constant_i$	6,250	5,965*	6,662	5,740
	(5,389)	(3,602)	(5,384)	(3,666)
Observations	6,058	6,058	6,058	6,058
Number of iddistrict	466	466	466	466
R-squared	0.559	0.466	0.560	0.468

Standard errors clustered at the district level

*** p<0.01, ** p<0.05, * p<0.1

Appendix C – Investment applications excluded from the estimation

The purpose underlying the collection of this data set is to measure foreign willingness to invest capital in the Federal Republic of Germany during an early period after the end of the Second World War. The particular regulatory environment in place between June 1950 and June 1955 allows for a comprehensive measure: The records of the governmental investment commission reveal the universe of projects in which a non-resident investor decides to involve herself directly and invest any of her capital into a company located within the Federal Republic of Germany, i.e. West Germany excluding West Berlin. The raw data retrieved from the records, however, contain a number of applications which, if retained, would violate the consistency of the measure. Such applications need to be excluded from the sample before empirical results can be produced.

The following paragraphs list all excluded applications by reason for their exclusion. Individual applications are uniquely identified by their earliest appearance in the records of the investment commission. Records under the shelf marks BArch B102.6735 to BArch B102.6740 contain the minutes of the commission meetings. The minutes for each individual meeting consist of actual written minutes ("*Vermerk*") and a list of all applications reviewed during the meeting ("*Besprechungspunkte*"). Starting with the 20th meeting, this overall list is in turn subdivided into several lists 1, 2, etc., or respectively A, B, etc. (e.g. "*Besprechungspunkte Liste A*"). In practice, individual applications are thus uniquely identified by the combination of meeting number, list number and case number on the particular list (e.g. meeting 34, list D, case 17). The precise location of individual minutes in the Federal Archives (Koblenz) are as follows:

BArch B102.6735: 1st meeting (October 6, 1950) – 21st meeting (July 6, 1951)

BArch B102.6736: 22nd meeting (July 20, 1951) – 49th meeting (July 18, 1952)

BArch B102.6737: 50th meeting (August 1, 1952) – 69th meeting (May 8, 1953)

BArch B102.6738: 70th meeting (May 22, 1953) – 85th meeting (December 18, 1953)

BArch B102.6739: 86th meeting (January 8, 1954) – 110th meeting (December 17, 1954)

BArch B102.6740: 111th meeting (January 14, 1955) – 122nd meeting (September 30, 1955)

In addition, I assign a unique identification number to each investor, in order to be able to track individual investors over time across consecutive applications. In the tables below, the column "Inv.-ID" yields the identification number of the investor under consideration.

Excluded applications can be distinguished according to whether they are excluded categorically or on a discretionary basis.

C.1. Categorically excluded applications

Categorically excluded applications may constitute perfectly serious investment projects. They are excluded nevertheless, because their retention would violate the consistency of the final data set. In fact, they belong to certain categories of applications either not fully observable through the records of the investment commission, or miscellaneous in the sense of falling outside the scope of foreign direct investment. Therefore such applications are subject to an arbitrary process of self-selection into the data, over and above the systematic self-selection from which all applications suffer in general. For example, a small number of destination companies based in West Berlin ended up in the commission records, even though in theory they fell under the jurisdiction of the separate regulatory regime for West Berlin. Their observability through the Federal German regulatory body is thus arbitrary, that is, its reason is untraceable. In contrast, observability of destination companies based in Lower Saxony is systematic, as long as the individual approval requirement existed.

Categorically excluded categories of applications are: all applications filed later than the first quarter of 1955, all loan applications filed later than the fourth quarter of 1953, applications involving residents of the Soviet occupation zone of Germany, applications in which the investment destination is located in West Berlin, applications for transactions with purely non-corporate entities, and miscellaneous applications.

C.1.1 Applications filed later than the first quarter of 1955

The individual licencing requirement was dropped on June 15, 1955, for direct investment projects of all types below an investment amount of 500,000 DM [151]. All applications below that threshold which were still being processed at the time were summarily approved[152]. As a result, the universe of equity investment projects is observable through the commission records only up to the first quarter of 1955, given the average processing delay between the filing of the application and the time of its first mention in the commission records. I therefore drop all applications filed during the second or third quarter of 1955 from the sample.

[151] BArch B102.57662, Gemeinsame Pressenotiz des Bundesministers für Wirtschaft und der Bank deutscher Länder vom 15. Juni 1955.
[152] BArch B102.6740, 121. Sitzung vom 16.6.1955, Vermerk, p. 1.

Table C.1.1 – Applications filed later than the first quarter of 1955.

Inv.-ID	Meeting	List	Case	Application filed
565	122	A	6	3rd quarter 1955
904	120	B	18	2nd quarter 1955
1098	122	A	2	3rd quarter 1955
2371	121	A	3	2nd quarter 1955
3405	122	A	7	3rd quarter 1955
4376	121	B	9	2nd quarter 1955
4490	120	A	2	2nd quarter 1955
4496	120	A	10	2nd quarter 1955
4514	120	B	8	2nd quarter 1955
4524	120	B	17	2nd quarter 1955
4536	121	A	5	2nd quarter 1955
4537	121	A	6	2nd quarter 1955
4538	121	A	7	2nd quarter 1955
4539	121	A	7	2nd quarter 1955
4540	121	A	8	2nd quarter 1955
4541	121	A	9	2nd quarter 1955
4542	121	A	9	2nd quarter 1955
	121	A	9a	2nd quarter 1955
4544	121	A	11	2nd quarter 1955
4547	121	B	1	2nd quarter 1955
4552	121	B	5	2nd quarter 1955
4553	121	B	5	2nd quarter 1955
4554	121	B	6	2nd quarter 1955
4555	121	B	6	2nd quarter 1955
4556	121	B	6	2nd quarter 1955
4557	121	B	6	2nd quarter 1955
4558	121	B	6	2nd quarter 1955
4559	121	B	6	2nd quarter 1955
4560	121	B	6	2nd quarter 1955
4563	121	B	10	2nd quarter 1955
4564	121	B	11	2nd quarter 1955
4565	121	B	11	2nd quarter 1955
4566	121	B	11	2nd quarter 1955
4567	121	B	12	2nd quarter 1955
4568	122	A	3	3rd quarter 1955
4569	122	A	4	3rd quarter 1955
4570	122	A	5	3rd quarter 1955

C.1.2 Loan applications filed later than the fourth quarter of 1953

On February 2, 1954, the individual licencing requirement for loans to domestic debtors was essentially decentralised[153]. Henceforth, *Land* Central Banks were authorized to approve future applications for most types of transactions on their own authority. The Investment Commission on the Federal level retained authority over all equity investments and only certain types of direct lending between non-resident investors and domestic debtors. As a result, the universe of foreign lending is observable only up to the fourth quarter of 1953. I therefore drop all loan applications from the sample that were filed later than the fourth quarter of 1953.

Table C.1.2 – Loan applications filed later than the fourth quarter of 1953.

Inv.-ID	Meeting	List	Case	Application filed
24	96	D	19	2nd quarter 1954
122	98	Dev.	102	1st quarter 1954
219	96	D	17	1st quarter 1954
234	93	Dev.	104	1st quarter 1954
236	103	D	16	2nd quarter 1954
307	121	B	13b	1st quarter 1955
374	104	B	7	2nd quarter 1954
381	94	D	7	1st quarter 1954
384	106	D	7	3rd quarter 1954
390	98	B	5	1st quarter 1954
404	98	D	16	1st quarter 1954
512	100	Dev.	108	2nd quarter 1954
563	107	B	12	3rd quarter 1954
571	102	B	5	2nd quarter 1954
600	96	B	11	1st quarter 1954
629	105	Dev.	101	3rd quarter 1954
	111	D	45	4th quarter 1954
642	93	B	18	1st quarter 1954
646	96	B	1	1st quarter 1954
652	93	B	12	1st quarter 1954
653	98	D	2	1st quarter 1954
662	95	B	12	1st quarter 1954
664	98	B	4	1st quarter 1954
707	99	B	1	2nd quarter 1954
708	103	D	8	2nd quarter 1954
708	98	D	7	1st quarter 1954

[153] BArch B102.57662, Rundschreiben A20/54 der Bank deutscher Länder an die Vorstände der Landeszentralbanken und das Direktorium der Berliner Zentralbank vom 2.2.1954.

Inv.-ID	Meeting	List	Case	Application filed
711	100	D	2	2nd quarter 1954
720	94	D	8	1st quarter 1954
753	110	D	20	3rd quarter 1954
828	98	D	24	1st quarter 1954
829	95	B	4	1st quarter 1954
844	96	D	27	1st quarter 1954
849	101	D	9	1st quarter 1954
942	96	D	13	1st quarter 1954
971	91	D	43	1st quarter 1954
1018	103	D	22	3rd quarter 1954
1095	102	D	9	2nd quarter 1954
1114	95	D	12	1st quarter 1954
1167	103	D	6	3rd quarter 1954
1185	99	D	19	2nd quarter 1954
1189	104	Dev.	106	3rd quarter 1954
1264	98	D	23	1st quarter 1954
	100	B	1	2nd quarter 1954
	100	B	2	2nd quarter 1954
1378	88	D	12	1st quarter 1954
	111	D	5	3rd quarter 1954
1485	119	B	9	1st quarter 1955
1509	100	Dev.	103	2nd quarter 1954
1530	102	D	8	2nd quarter 1954
1535	95	Dev.	101	1st quarter 1954
1617	93	B	5	1st quarter 1954
1676	99	D	9	2nd quarter 1954
1782	94	D	11	1st quarter 1954
2051	95	D	10	1st quarter 1954
2114	102	B	1	2nd quarter 1954
2151	94	B	10	1st quarter 1954
2186	100	D	5	2nd quarter 1954
2260	93	B	6	1st quarter 1954
2278	91	B	12	1st quarter 1954
2351	96	B	10	1st quarter 1954
2378	95	B	3	1st quarter 1954
2406	93	B	4a	1st quarter 1954
2407	93	B	4b	1st quarter 1954
2466	97	B	6	1st quarter 1954
2516	102	D	10	2nd quarter 1954
2517	97	B	7	1st quarter 1954
2548	117	B	10	4th quarter 1954
2552	96	D	17	1st quarter 1954

Inv.-ID	Meeting	List	Case	Application filed
2555	90	A	1	1st quarter 1954
2593	104	B	5	3rd quarter 1954
2724	103	D	9	2nd quarter 1954
2740	97	D	12	2nd quarter 1954
2794	96	D	12	1st quarter 1954
2873	100	Dev.	112	2nd quarter 1954
2944	103	D	14	2nd quarter 1954
2950	102	Dev.	106	2nd quarter 1954
2956	93	D	7	1st quarter 1954
3001	96	D	22	2nd quarter 1954
3101	99	Dev.	103	2nd quarter 1954
3176	101	Dev.	102	2nd quarter 1954
3187	92	B	17	1st quarter 1954
3204	97	D	11	1st quarter 1954
3228	118	B	15	1st quarter 1955
3274	91	D	17	1st quarter 1954
3280	94	D	5	1st quarter 1954
3381	95	B	7	1st quarter 1954
3399	95	B	8	1st quarter 1954
3405	93	B	9	1st quarter 1954
3405	104	B	6	2nd quarter 1954
3405	122	A	7	3rd quarter 1955
3454	97	B	8	1st quarter 1954
3482	104	B	3	2nd quarter 1954
3500	90	B	7	1st quarter 1954
3513	90	Dev.	102	1st quarter 1954
3516	90	C	1	1st quarter 1954
3566	91	D	13	1st quarter 1954
3579	91	D	42	1st quarter 1954
3605	92	B	13	1st quarter 1954
3606	92	B	14	1st quarter 1954
3610	92	D	6	1st quarter 1954
3615	92	D	17	1st quarter 1954
3627	92	Dev.	108	1st quarter 1954
3629	93	B	8	1st quarter 1954
3639	93	B	17	1st quarter 1954
3642	93	D	1	1st quarter 1954
3643	93	D	2	1st quarter 1954
3645	93	D	6	1st quarter 1954
3652	93	Dev.	108	1st quarter 1954
3654	94	B	3	1st quarter 1954
3662	94	B	9	1st quarter 1954

Inv.-ID	Meeting	List	Case	Application filed
3670	94	D	9	1st quarter 1954
3673	94	D	12	1st quarter 1954
3674	94	D	13	1st quarter 1954
3682	94	Dev.	111	1st quarter 1954
3685	95	B	6	1st quarter 1954
3694	95	D	13	1st quarter 1954
3695	95	D	14	1st quarter 1954
3700	95	D	17	1st quarter 1954
	95	D	18	1st quarter 1954
3702	95	D	20	1st quarter 1954
3704	95	Dev.	102	1st quarter 1954
3712	95	Dev.	108	1st quarter 1954
3722	96	B	9	1st quarter 1954
3723	96	B	12	1st quarter 1954
3731	96	D	10	1st quarter 1954
3732	96	D	11	1st quarter 1954
3733	96	D	11	1st quarter 1954
3734	96	D	14	1st quarter 1954
3735	96	D	15	1st quarter 1954
3736	96	D	16	1st quarter 1954
	112	D	2	4th quarter 1954
3737	96	D	18	1st quarter 1954
3739	96	D	26	2nd quarter 1954
3741	96	D	29	1st quarter 1954
3743	96	Dev.	102	2nd quarter 1954
3752	97	B	5	1st quarter 1954
3753	97	B	9	1st quarter 1954
3754	97	B	10	1st quarter 1954
3759	97	D	1	2nd quarter 1954
3760	97	D	2	1st quarter 1954
3761	97	D	3	1st quarter 1954
3762	97	D	4	2nd quarter 1954
3771	97	D	13	1st quarter 1954
3772	97	D	14	2nd quarter 1954
3790	98	B	11	1st quarter 1954
3794	98	D	4	2nd quarter 1954
3804	98	D	15	1st quarter 1954
3805	98	D	17	2nd quarter 1954
3806	98	D	18	2nd quarter 1954
3811	98	D	22	1st quarter 1954
3826	99	B	8	2nd quarter 1954
3831	99	D	7	2nd quarter 1954

Inv.-ID	Meeting	List	Case	Application filed
3832	99	D	8	2nd quarter 1954
3833	99	D	13	2nd quarter 1954
3841	99	Dev.	101	2nd quarter 1954
3845	99	Dev.	106	2nd quarter 1954
3846	100	B	3	2nd quarter 1954
3851	100	D	1	2nd quarter 1954
3852	100	D	3	2nd quarter 1954
3854	100	D	7	1st quarter 1954
3855	100	D	8	2nd quarter 1954
3856	100	Dev.	102	2nd quarter 1954
3859	100	Dev.	107	2nd quarter 1954
3865	100	Dev.	116	2nd quarter 1954
3873	101	B	6	1st quarter 1954
3876	101	D	4	2nd quarter 1954
3881	101	D	10	2nd quarter 1954
3882	101	D	11	2nd quarter 1954
3883	101	D	14	2nd quarter 1954
3885	101	D	16	2nd quarter 1954
3909	102	D	11	3rd quarter 1954
3910	102	D	12	3rd quarter 1954
3918	102	Dev.	101	3rd quarter 1954
3920	102	Dev.	103	2nd quarter 1954
3921	102	Dev.	104	2nd quarter 1954
3922	102	Dev.	105	2nd quarter 1954
3924	102	Dev.	108	2nd quarter 1954
3931	103	B	7	2nd quarter 1954
3934	109	B	1	3rd quarter 1954
3939	103	D	11	2nd quarter 1954
3950	103	D	15	3rd quarter 1954
3951	103	D	17	3rd quarter 1954
3954	103	D	19	2nd quarter 1954
3960	103	Dev.	102	3rd quarter 1954
3961	103	Dev.	103	2nd quarter 1954
3962	103	Dev.	104	2nd quarter 1954
3963	103	Dev.	105	3rd quarter 1954
3964	103	Dev.	106	2nd quarter 1954
3973	104	B	1	3rd quarter 1954
3974	104	B	4	3rd quarter 1954
3987	104	Dev.	109	2nd quarter 1954
4029	106	B	9	3rd quarter 1954
4035	106	Dev.	102	3rd quarter 1954
4067	107	D	15	1st quarter 1954

Inv.-ID	Meeting	List	Case	Application filed
4071	108	B	4	3rd quarter 1954
4077	108	B	9	3rd quarter 1954
4120	110	B	4	3rd quarter 1954
4126	110	B	9	3rd quarter 1954
4144	111	B	6	4th quarter 1954
4145	111	B	8	1st quarter 1954
4210	111	D	56	4th quarter 1954
4218	112	B	9	3rd quarter 1954
4239	112	D	8	4th quarter 1954
4284	113	D	19	4th quarter 1954
4300	114	B	10	2nd quarter 1954
4339	115	D	11	4th quarter 1954
4341	115	D	14	1st quarter 1955
4350	115	D	19	3rd quarter 1954
4353	115	D	23	4th quarter 1954
4376	121	B	9	2nd quarter 1955
4398	116	D	21	1st quarter 1955
4412	117	D	5	1st quarter 1955
4445	118	B	2	1st quarter 1955
4475	119	A	16	1st quarter 1955
4489	120	A	1	1st quarter 1955
4501	120	A	16	1st quarter 1955
4568	122	A	3	3rd quarter 1955
4587	103	B	6	3rd quarter 1954
4598	103	B	8	3rd quarter 1954
4605	95	D	11	1st quarter 1954
4606	103	D	7	2nd quarter 1954

C.1.3 Applications involving residents of the Soviet occupation zone of Germany

The investment commission records contain a small number of applications for which the non-resident investor is a resident of the Soviet occupation zone of Germany. East German applicants attempted to prepare their emigration to the West by granting loans to or purchasing shares in West German companies. I drop these applications from the sample for two reasons: Firstly, the non-resident investor was not a foreigner and was likely to immigrate soon. Secondly, individuals or corporations from Communist countries were otherwise not authorized to invest in West Germany at all, turning the few observations which are in the commission records into statistical artefacts.

Table C.1.3 – Applications involving residents of the Soviet occupation zone.

Inv.-ID	Meeting	List	Case	Stated location of non-resident applicant
126	8	---	5	Freiberg, Saxony
1534	40	D	10	Unknown identity, trustee located in Dortmund
	40	D	11	
1752	46	B	3	Lindenthal bei Leipzig
2428	61	D	24	Gogolin, Upper Silesia (Polish administration)
2663	68	B	1	Leipzig
2723	69	C	3	Oberfrohna, Saxony
	69	C	4	
3061	78	D	17	Radebeul, Saxony
3359	85	D	31	Hirschfeld, Saxony
3405	86	D	31	Muldenhammer (Erzgebirge), Saxony, trustee located in West Berlin.
	93	B	9	
	104	B	6	
	122	A	7	
3553	91	B	16	Borsdorf, Saxony
3689	95	D	6	Unspecified location in Soviet Occupation Zone
4139	110	D	16	Unknown identity, trustee located in Bielefeld
4218	112	B	9	Berlin-Treptow
4475	119	A	15	Halle (Saale), trustee located in Frankfurt.
	119	A	16	
4569	122	A	4	Oberlungwitz, Saxony, at the moment political prisoner [sic!] in Strafanstalt Bautzen, Saxony, trustee located in Würzburg.

C.1.4 Applications in which the investment destination is located in West Berlin

Due to its peculiar legal position, West Berlin had its own licencing regime for foreign investments coming into the city[154]. I therefore drop all five applications involving destination companies located in West Berlin, which nevertheless appeared in the commission records for some reason.

Table C.1.4 – Applications with investment destinations located in West Berlin.

Inv.-ID	Meeting	List	Case	Location of investment destination
294	13	---	17	Berlin-Friedenau
356	15	---	12	Berlin-Dahlem
	19	---	4a	Berlin-Dahlem
765	24	1	13	Berlin-Spandau (plants in Schleswig-Holstein)
1004	30	2	43	Berlin-Charlottenburg

[154] BArch B102.6739, 89. Sitzung vom 19.2.1954, Vermerk, p.3.

C.1.5 Applications for transactions with purely non-corporate entities

From the time of the lifting of the Allied investment embargo, certain financial transactions between non-resident and residents of West Germany which required individual approval had been under the sole authority of the *Bank deutscher Länder*, without consultation of the investment commission (*Direktgenehmigung*). These transactions were essentially limited to mere real estate investments, i.e. the payment of building costs, as well as loans to private individuals and charities for the payment of building costs[155]. Moreover, support payments to private residents of West Germany below a certain monthly threshold did not require any administrative approval at all (Kühne 1984). At the same time, the investment commission did adjudicate on a number of applications which were very similar to those falling under *Direktgenehmigung* or a general licence. I drop these from the sample in order to safeguard the universality of the foreign direct investment measure, which is therefore meant only to include all transactions involving a German company as the resident partner.

Table C.1.5 – Applications for transactions with purely non-corporate entities.

Inv.-ID	Meeting	List	Case	Type of investment destination and transaction
15	2	---	17	Private individual – construction loan and present
23	3	---	9	Private individual – construction loan
28	3	---	16	Private individual – construction loan
66	5	---	13	Private individual – construction loan
67	5	---	14	Private individual – construction loan
95	6	---	18	Private individual – construction loan
96	6	---	19	Private individual – construction loan
118	7	---	17	Private individual – loan to financial trustee
119	7	---	18	Private individual – personal aid in form of loan
146	8	---	28	Private individual – construction loan
149	8	---	34	Private individual – construction loan
212	10	---	31	Private individual – construction loan
262	12	---	13	Private individual – construction loan
270	12	---	21	Private individual – construction loan
277	12	---	29	Private individual – construction loan
293	13	---	16	Private individual – construction loan
294	13	---	17	Private individual – loan to financial trustee
299	13	---	23	Private individual – construction loan
303	13	---	28	Private individual – construction loan
313	14	---	14	Charity (religious order) – construction loan

[155] See the list of *Direktgenehmigung* applications attached to the files of some of the commission meetings, for example BArch B102.6737, 52. Sitzung vom 29.8.1952, Übersicht: Direkt-Genehmigungen durch BdL.

Inv.-ID	Meeting	List	Case	Type of investment destination and transaction
316	14	---	17	Private individual – construction loan
317	14	---	18	Private individual – construction loan
334	14	---	37	Private individual – construction loan
340	14	---	45	Charity (church) – construction loan
342	14	---	47	Private individual – construction loan
344	14	---	52	Private individual – construction loan
356	15	---	12	Charity (religious order) – charitable donation
	19	---	4a	Charity (religious order) – construction loan
379	15	---	43	Private individual – Real estate investment
384	49	B	27	Private individual – loan for sundry investments
393	16	---	7	Private individual – construction loan
400	16	---	14	Private individual – construction loan
403	16	---	18	Charity (church) – subsidy in form of loan
412	16	---	28	Charity (religious order) – construction loan
437	17	---	16	Charity (church) – construction loan
438	17	---	17	Charity (church) – construction loan
439	17	---	18	Political organization – construction loan
452	19	---	6	Private individual – construction loan
	22	1	30	Private individual – debt restructuring
493	29	2	30	Private individual – construction loan
541	19	---	49	Charity (religious order) – construction loan
735	39	D	15	Private individual – loan supporting relative
761	33	C	21	Private individual – personal aid in form of loan
870	26	2	43	Charity (church) – construction loan
877	26	2	57	Private individual – loan to financial trustee
882	26	2	63	Private individual – Private offsetting of claims
951	29	1	15	Private individual – personal aid in form of loan
1036	30	2	83	Private individual – remuneration in form of loan
1064	31	2	21	Private individual – debt restructuring
1118	51	B	7	Private individual – construction loan
1137	117	D	12	Private individual – construction loan
1176	33	D	17	Private individual – personal aid in form of loan
1197	34	B	2	Charity (church) – subsidy in form of loan
1221	35	A	4	Charity (church) – subsidy in form of loan
1223	35	A	7	Charity (church) – subsidy in form of loan
1228	35	A	14	Private individual – personal aid in form of loan
1290	36	A	8	Charity (church) – subsidy in form of loan
	61	B	2	Charity (church) – subsidy in form of loan
1345	36	D	17	Private individual – construction loan
1444	38	D	18	Private individual – loan to financial trustee
1584	41	D	12	Charity (welfare) – charitable donation
1853	48	B	24	Private individual – construction loan

Inv.-ID	Meeting	List	Case	Type of investment destination and transaction
1968	77	D	26	Charity (welfare) – construction loan
2158	54	D	1	Political organization – subsidy payment
2177	59	B	2	Fraternal organization – construction loan
2516	64	D	21	Private individual – construction loan
2614	67	B	1	Charity (welfare) – subsidy in form of loan
3035	78	A	1	Private individual – construction loan
3053	78	D	4	Private individual – construction loan
3086	79	D	23	Private individual – personal aid in form of loan
3177	81	D	25	Private individual – personal aid in form of loan
3464	89	B	10	Private individual – personal aid in form of loan
3670	94	D	9	Private individual – debt restructuring
3731	96	D	10	Charity (religious order) – subsidy in form of loan
3747	96	Dev.	106	Private individual – construction loan
3778	97	Dev.	101	Private individual – construction loan
3919	102	Dev.	102	Private individual – construction loan
4035	106	Dev.	102	Private individual – debt restructuring
4213	112	B	6	Private individual – construction loan
4339	115	D	11	Private individual – personal aid in form of loan
4412	117	D	5	Private individual – debt restructuring
4490	120	A	2	Private individual – construction loan

C.1.6 Miscellaneous applications

The records of the investment commission contain a range of transaction types which cannot be classified as foreign direct investment without violating the universality of the measure, as pointed out above in Appendix C.1.5. Beyond the categories already mentioned, the records also contain applications which did not involve any financial investment at all. In this context, the most prominent example are changes of legal form to existing subsidiaries of foreign companies. The foreign parent would "invest" the value of the existing subsidiary into a new company with changed legal form. Financially, however, such transactions involved no additional investment of any kind. Another prominent example are applications for retrospective approval of embargo violations. Using foreign exchange in cash or accounts receivable, a limited number of non-resident investors had acquired shares in small German companies even before June 1950. If they subsequently sought commission approval for other projects after the lifting of the embargo, or if they were caught by the authorities, they were forced to seek retrospective approval or otherwise shut down their illegal subsidiary. I remove these cases from the sample, because the corresponding financial transaction occurred outside the period under consideration.

Table C.1.6 – Miscellaneous applications.

Inv.-ID	Meeting	List	Case	Type of transaction - Reason for application
15	2	---	17	Present or subsidy payment
89	47	D	14	Sale of German assets among non-residents
130	86	D	29	Disinvestment
296	108	B	3b	Debt cancellation by foreign parent company
356	15	---	12	Present or subsidy payment
	41	A	1	Change of legal form of subsidiary
375	84	B	14a	Change of legal form of subsidiary
379	15	---	43	Real estate investment
387	15	---	54	Asset revaluation during RM to DM conversion
407	116	D	20	Shareholder pay-out with subsidiary assets
437	17	---	16	Charitable donation
438	17	---	17	Charitable donation
439	17	---	18	Charitable donation
452	120	A	17	Participation in consortium (without capital call)
557	111	D	49	Change of legal form of subsidiary
573	54	D	3	Change of legal form of subsidiary
882	26	2	63	Private offsetting of claims
936	58	D	39	Real estate investment
1313	73	D	13	Change of non-resident creditor
1412	50	B	14	Change of legal form of subsidiary
1500	111	D	49	Change of legal form of subsidiary
1576	41	D	2	Change of legal form of subsidiary
	41	D	3	Change of legal form of subsidiary
1585	41	D	14	Subsidy in form of loan.
1596	42	B	5a	Change of legal form of subsidiary
	42	B	5b	Change of legal form of subsidiary
1599	42	B	10a	Retroactive approval of embargo-era investment
1618	42	D	4	Change of legal form of subsidiary
1619	42	D	5	Change of legal form of subsidiary
	42	D	6	Change of legal form of subsidiary
1682	44	B	5	Retroactive approval of embargo-era investment
1702	44	D	15	Present or subsidy payment
1724	45	B	18	Disinvestment
1770	59	B	11	Present or subsidy payment
1838	48	B	2	Retroactive approval of embargo-era investment
1878	48	D	6b	Change of legal form of subsidiary
1892	48	D	24	Lending among non-residents.
1943	50	A	1	Change of legal form of subsidiary
1952	50	B	4a	Retroactive approval of embargo-era investment
1953	50	B	4b	Retroactive approval of embargo-era investment
1954	50	B	4c	Retroactive approval of embargo-era investment

Inv.-ID	Meeting	List	Case	Type of transaction - Reason for application
2076	52	D	1	Change of legal form of subsidiary
2078	52	D	6	Retroactive approval of embargo-era investment
2141	54	B	10	Present or subsidy payment
2158	54	D	1	Real estate investment
2204	55	D	4	Change of legal form of subsidiary
2233	56	D	1b	Present or subsidy payment
2280	58	B	8	Corporate succession involving recent emigrant
2362	60	C	7	Change of legal form of company share
2380	111	D	18	Retroactive approval of embargo-era investment
2398	112	B	1	Change of legal form of subsidiary
2419	61	D	12a	Change of legal form of subsidiary
	61	D	12b	Change of legal form of subsidiary
2465	45	D	33	Advance payment for shipbuilding contract
2587	66	D	8	Retroactive approval of embargo-era investment
2643	67	D	11	Retroactive approval of embargo-era investment
2702	68	D	31	Retroactive approval of embargo-era investment
2789	72	B	7b	Retroactive approval of embargo-era investment
2814	72	D	8	Change of legal form of subsidiary
2831	72	D	40	Retroactive approval of embargo-era investment
2838	72	D	50	Change of legal form of subsidiary
2842	72	D	58	Retroactive approval of embargo-era investment
2902	74	D	4b	Change of legal form of subsidiary
2977	76	B	22	Present or subsidy payment
3005	77	B	8	Change of legal form of subsidiary
3112	80	D	1a	Change of legal form of subsidiary
3166	81	D	10	Payment of cost overrun by foreign customer
3173	81	D	19	Change of legal form of company share
3181	82	A	2	Change of legal form of subsidiary
3225	82	D	21a	Retroactive approval of embargo-era investment
3226	82	D	21b	Retroactive approval of embargo-era investment
3259	83	D	7	Change of legal form of subsidiary
3273	83	D	25	Retroactive approval of embargo-era investment
	96	D	21	Retroactive approval of embargo-era investment
3280	112	D	7	Change of legal form of subsidiary
3335	85	D	10	Retroactive approval of embargo-era investment
	85	D	11	Retroactive approval of embargo-era investment
3340	85	D	15a	Retroactive approval of embargo-era investment
3341	85	D	15b	Retroactive approval of embargo-era investment
3342	85	D	15c	Retroactive approval of embargo-era investment
3350	85	D	22a	Retroactive approval of embargo-era investment
3351	85	D	22b	Retroactive approval of embargo-era investment
3352	85	D	22c	Retroactive approval of embargo-era investment

Inv.-ID	Meeting	List	Case	Type of transaction - Reason for application
3366	85	D	41	Change of legal form of company share
3521	90	D	3	Change of legal form of subsidiary
3526	90	D	8	Participation in settlement of an estate
3550	120	B	2	Retroactive approval of embargo-era investment
	120	B	3	Retroactive approval of embargo-era investment
3552	91	B	13	Retroactive approval of embargo-era investment
3553	91	B	16	Retroactive approval of embargo-era investment
3611	92	D	9	Retroactive approval of embargo-era investment
	113	B	1	Retroactive approval of embargo-era investment
3660	94	B	7	Retroactive approval of embargo-era investment
3689	95	D	6	Gratuitous acquisition of company share
3697	95	D	16a	Retroactive approval of embargo-era investment
3698	95	D	16b	Retroactive approval of embargo-era investment
3699	95	D	16c	Retroactive approval of embargo-era investment
3701	95	D	19	Retroactive approval of embargo-era investment
3728	96	D	6	Change of legal form of company share
3737	114	B	1	Disinvestment
3840	99	D	18	Retroactive approval of embargo-era investment
3886	101	D	17a	Retroactive approval of embargo-era investment
3887	101	D	17b	Retroactive approval of embargo-era investment
3978	104	D	2a	Retroactive approval of embargo-era investment
3979	104	D	2b	Retroactive approval of embargo-era investment
4085	108	D	9	Retroactive approval of embargo-era investment
	108	D	10	Retroactive approval of embargo-era investment
4087	108	D	12	Gratuitous acquisition of company share
4104	109	D	6	Change of legal form of subsidiary
4139	110	D	16	Retroactive approval of embargo-era investment
4145	111	B	9	Retroactive approval of embargo-era investment
4178	111	D	26	Retroactive approval of embargo-era investment
4193	111	D	41a	Change of legal form of company share
4193	111	D	42a	Change of legal form of company share
4194	111	D	41b	Change of legal form of company share
4194	111	D	42b	Change of legal form of company share
4195	111	D	41c	Change of legal form of company share
4195	111	D	42c	Change of legal form of company share
4196	111	D	41d	Change of legal form of company share
4196	111	D	42d	Change of legal form of company share
4197	111	D	41e	Change of legal form of company share
4197	111	D	42e	Change of legal form of company share
4198	111	D	41f	Change of legal form of company share
4198	111	D	42f	Change of legal form of company share
4258	113	B	10	Change of legal form of company share

Inv.-ID	Meeting	List	Case	Type of transaction - Reason for application
4260	113	B	12	Change of legal form of company share
4640	72	D	50f	Change of legal form of company share

C.2. Applications excluded on a discretionary basis

Applications are excluded on a discretionary basis if they do not represent serious foreign direct investment projects. There is verifiable evidence that at the time the investment commission rendered its final verdict on the application, the non-resident applicant did not - or did no longer - intend to commit her capital to a West-German asset on a long-term basis. Based on this definition, I distinguish three types of applications excluded on a discretionary basis:

- Bogus investment applications: Judging by the application papers, these are ostensibly serious investment projects. They are, however, in reality either meant to camouflage activities illegal under contemporary German law, or they involve a foreign applicant defrauding capital-hungry domestic companies. While the reason for excluding applications falling under the second condition is straightforward, the first condition needs to be elaborated on further. I only exclude applications in conflict with German law, if there is evidence that the foreign applicant did not intend to invest capital in Germany on a long-term basis, or if any of the participants is clearly identified as a go-between for such activities in archival sources. Therefore, I do not exclude illegal activities if a long-term investment motive can nevertheless not be excluded. Transfer pricing, for example, was illegal under contemporary German law. Applying transfer pricing, however, does not necessarily exclude serious, long-term investment motives. Applications of such companies are therefore retained in the final data set, even though they involve illegal activities.

- Redundant applications: Individual investment projects may be redundant for two reasons: Firstly, the application was withdrawn before the investment commission reached its final verdict. At the time of withdrawal, the non-resident applicant clearly no longer intended to purchase the West German assets under consideration. The investment project thus ceased to exist before it could potentially materialise following approval by the investment commission. Secondly, a permit was denied at some point in time by the commission, and the non-resident applicant subsequently filed another application to replace the denied first one. In such a case, I code the first, original application as redundant. Retaining it in the final sample would result in double-counting the single investment project under consideration.

Excluding the first, rather than the second application is motivated by the consideration that the investment project could eventually have materialized in case the second application had been approved, while the first application never had a chance of materializing in the first place. Even though a willingness to invest capital in Germany is observable since the time of filing the first application, the investor had the opportunity to adjust the project in between the denial of the first and the filing of the second application. This is true even if she chose not to make any adjustments in the end.

In contrast to these two reasons, I do not exclude investment projects for which the applications were approved, yet which I know not to have materialized eventually. Such projects and the corresponding applications are economically redundant. Knowledge of their eventual redundancy is incidental, however, as the final realization of approved investment projects is not systematically observable in any case through the records of the investment commission. Note that this rationale is essentially different from the first reason cited above for coding applications as redundant. In the latter case, the respective applications never passed the administrative procedure established through the investment commission, which provides the observational window for the present study. In the former case, applications did gain commission approval. The resulting permits, however, were never utilized, which I am aware of only by chance.

- Applications filed by actual or prospective immigrants: The concept of foreign investment is contingent on the ability to distinguish foreign from domestic investors. This distinction is blurred in case the foreign investor is a prospective immigrant to the destination country, or in case her identification as a foreign rather than a domestic individual is spurious. In the first case, the foreign investment is made with a view of turning it into domestic investment. In the second case, the supposed foreign investment actually is domestic. The definition of foreignness implied by contemporary exchange controls in general, and the records of the investment commission in particular, was based on residence, not nationality. Specifically, it was defined by residing permanently outside the territory in which the *Deutschmark* is legal tender ("*Devisenausländer*"). Thus, a German national could be a non-resident applicant, i.e. a foreign investor. Equally, foreign nationals could serve as resident, i.e. domestic, participants in a foreign investment project. Whether or not an individual staying in Germany was considered a domestic resident for the purposes of exchange control and taxation ("*Deviseninländer-Eigenschaft*") was determined by the competent *Land* Central Bank upon individual application. Thus, actual immigrants could still appear as non-resident applicants due to belated certification of their resident status.

C.2.1 Bogus investment applications

I exclude three types of transactions which I term bogus or fraudulent investment applications. Please refer to Chapter One for details on the reason for their existence, as well as on how they worked in practice.

- **Type 1**: Camouflaging capital flight or *Sperrmark* arbitrage. In such cases, the participants did not intend to invest capital in the German economy on a long-term basis. The aim of underlying financial transactions was rather to accumulate the profits from *Sperrmark* arbitrage outside of Germany. The domestic destination company is merely an accessory to unblocking *Sperrmark*.

- **Type 2**: Repatriating German capital. In such cases, the domestic destination company did in fact receive the capital involved on a long-term basis. The supposedly foreign capital, however, was owned by the destination company itself through foreign straw men.

- **Type 3**: Fraudulent foreign intermediaries. In this case, the domestic destination company was a bone fide applicant that was being defrauded by a foreign entity claiming to possess ready capital for investment in the capital-hungry destination company. The latter had typically paid a variety of fees and expenses to German accomplices of the foreign fraudster before contact was broken off permanently.

Table C.2.1.1: List of bogus investment applications.

Inv.-ID	Meeting	List	Case	Type	Reference for exclusion decision
140	8	---	21	1	BArch B126.1561, Blatt 104.
149	8	---	34	1	BArch B126.1560, Blatt 93.
163	9	---	14	2	BArch B126.1560, Blatt 90.
	11	---	24		
165	9	---	16	1	BArch B126.1560, Blatt 57.
169	9	---	20	2	BArch B126.1561, Blatt 613.
	11	---	13		
226	11	---	11	1	BArch B126.1560, Blatt 66.
	19	---	28		
251	11	---	42	1	BArch B126.1561, Blatt 480.
261	12	---	12	1	BArch B126.1561, Blatt 472. BArch B126.1561, Blatt 396.
270	12	---	21	1	BArch B126.1560, Blatt 93.
280	12	---	32	2	BArch B126.1560, Blatt 90.
326	14	---	28a	2	BArch B126.1560, Blatt 99. BArch B126.1561, Blatt 606.
329	14	---	31	1	BArch B126.1561, Blatt 699.

Inv.-ID	Meeting	List	Case	Type	Reference for exclusion decision
330	14	---	32	1	BArch B126.1561, Blatt 699.
333	14	---	35	2	BArch B102.6760, 56. Sitzung (24.10.1952),
	14	---	36		Liste W, Nr. 21, Stellungnahme des LWM.
376	76	D	18	2	BArch B102.6788, 94. Sitzung (7.5.1954), Liste W, Nr. 26, Begleitbericht der Oberfinanz-direktion Freiburg vom 29.10.1953.
384	21	1	18	1/2	BArch B126.1560, Blatt 90.
	21	2	43		BArch B126.1561, Blatt 94.
	24	2	62		BArch B102.6757, 49. Sitzung (18.7.1952),
	49	B	27		Liste B, Nr. 27, Vertraulicher Anhang zum Devisenprüfungsbericht der Oberfinanz-direktion Düsseldorf vom 2.2.1955.
					BArch B102.1560, Blatt 36.
393	16	---	7	1	BArch B126.1560, Blatt 56.
	17	---	46		BArch B126.1560, Blatt 93.
	18	---	5		BArch B.102.6785, 91. Sitzung (19.3.1954),
	29	2	32		Liste W. Nr. 30, Stellungnahme der LZB.
398	16	---	12	2	BArch B102.6744, 16. Sitzung (20.4.1951), Nr. 12, Stellungnahme des LWM.
413	22	1	13	1	BArch B102.6760, 57. Sitzung (7.11.1952),
	22	1	14		Liste W. Nr. 28, Stellungnahme der LZB.
424	16	---	44	1	BArch B102.6758, 51. Sitzung (15.8.1952), Liste W., Nr. 11, Bericht der Oberfinanz-direktion Stuttgart vom 11.8.1952.
426	17	---	1	1	BArch B126.1561, Blatt 655.
430	17	---	6	1	BArch B126.1561, Blatt 650.
					BArch B102.6735, 17. Sitzung (7.5.1951), Besprechungspunkte Nr. 6.
					BArch B102.6737, 69. Sitzung (8.5.1953), Besprechungspunkte Liste C, Nr. 5.
452	19	--	6	1/2	BArch B126.1560, Blatt 100.
	22	1	30		BArch B126.1560, Blatt 449 ff.
	22	2	52		BArch B126.1561, Blatt 174 ff.
	32	2	2		Frankfurter Allgemeine Zeitung, Mittwoch, 2.
	80	D	44		Oktober 1957, S. 16. „Worum geht es in dem bevorstehenden Phrix-Prozeß?“.
					BArch B102.6738, Vermerk zur 80. Sitzung (9.10.1953), Liste abgelehnter Anträge, Nr. 5.
461	17	---	44	1	BArch B126.1560, Blatt 515.
					Die Zeit, Nr. 43, 22. Oktober 1965, „Fini, die Sperrmark-Gräfin“.
466	18	---	4	1	BArch B126.1560, Blatt 35.
	20	2	26		BArch B126.1560, Blatt 37.

Inv.-ID	Meeting	List	Case	Type	Reference for exclusion decision
468	18	---	7	1	BArch B102.6757, 49. Sitzung (18.7.1952), Liste B, Nr. 27, Vertraulicher Anhang zum Devisenprüfungsbericht der Oberfinanz-direktion Düsseldorf vom 2.2.1955. BArch B126.1560, Blatt 36.
486	18	---	28	1	BArch B126.1561, Blatt 535.
493	29	2	30	1	BArch B126.1560, Blatt 93.
	34	B	5		BArch B126.1560, Blatt 605.
	33	C	12		
	36	C	40		
	36	D	10		
	90	B	13		
498	18	---	46	1	BArch B126.1560, Blatt 508.
	26	2	58		
	35	C	29		
506	19	--	1	1	BArch B102.6737, 52. Sitzung (29.8.1952), Besprechungspunkte Liste D, Nr. 21.
	28	1	20		
	52	D	21		
508	19	---	7	2	BArch B126.1560, Blatt 99.
509	19	---	9	1	BArch B102.6745, 19. Sitzung (8.6.1951), Nr. 9, Vermerk Bundesfinanzministerium (Dr. Heinrichs) vom 13.12.1951.
	19	---	21		
527	19	---	29	2	BArch B126.1561, Blatt 727.
528	19	---	30	2	BArch B126.1561, Blatt 737.
550	19	---	58	1	BArch B126.1561, Blatt 100.
	22	2	62		
563	26	2	44	1	BArch B126.1560, Blatt 98.
575	20	1	21	1	BArch B126.1560, Blatt 5.
576	20	2	1	1	BArch B126.1561, Blatt 654. BArch B102.6761, 58. Sitzung (21.11.1952), Liste D, Nr. 5, Stellungnahme der LZB.
595	20	2	29	2	BArch B126.1561, Blatt 585.
634	21	2	45	1	B126.1560, Blatt 558.
	32	1	14		
666	28	1	22	1	B126.1560, Blatt 102.
686	22	2	60	2	BArch B126.1561, Blatt 212.
	44	D	28		Der Spiegel, Nr. 39, 24. September 1952,
	45	D	7		„…setzte auf Deutschland“.
725	23	2	43	2	BArch B126.1560, Blatt 103.
	50	C	1		
	53	B	8		
	55	B	14		
	76	D	7		
734	23	2	54	1	BArch B126.1560, Blatt 512.
735	23	2	55	1	BArch B102.6736, 46. Sitzung (6.6.1952), Besprechungspunkte Liste C, Nr. 16.
	39	D	15		
	46	C	16		BArch B126.1560, Blatt 66.

Inv.-ID	Meeting	List	Case	Type	Reference for exclusion decision
735	50	B	24	1	See above.
	110	B	8		
736	23	2	56	2	BArch B102.6736, Vermerk zur 34. Sitzung (7.12.1951), Seite 2 der Anlage, Liste II Nr. 8.
754	23	2	78	1	BArch B126.1560, Blatt 57.
757	24	1	3	2	BArch B126.1560, Blatt 91.
	24	1	4		BArch B126.1561, Blatt 97.
	45	B	8		
776	24	1	26	1	BArch 102.6767, 70. Sitzung (22.5.1953),
	24	1	27	1	Liste B, Nr. 2, Stellungnahme der LZB.
787	24	2	42	1/2	BArch B126.1560, Blatt 94.
	52	B	3		
803	24	2	64	2	BArch B126.1560, Blatt 96.
804	24	2	65	2	BArch B126.1560, Blatt 99.
827	24	2	92	1	BArch B126.1560, Blatt 350. Die Zeit, Nr. 50, 11. Dezember 1952, „Unternehmungen“.
841	26	1	10	1	BArch B126.1560, Blatt 193.
	26	2	61		BArch B126.1560, Blatt 316 ff.
	30	1	15		
	32	1	21		
	55	A	2		
	70	B	16		
	77	D	36		
	84	D	6		
854	26	2	24	1	BArch B102.6747, 26. Sitzung (31.8.1951), Liste 2, Nr. 24, Stellungnahme der LZB.
869	26	2	42	1	BArch B102.6747, 26. Sitzung (31.8.1951),
	26	2	45		Liste 2, Nr. 45, Ermittlungsbericht der
	28	2	64		Oberfinanzdirektion Stuttgart vom 9.5.1952.
	37	D	10		BArch B.102.6785, 91. Sitzung (19.3.1954),
	39	B	5		Liste W. Nr. 30, Stellungnahme der LZB.
	40	B	6		
872	26	2	46	1	BArch B126.1560, Blatt 66.
874	48	B	40	1	BArch B126.1560, Blatt 105.
	48	B	41		
909	28	2	39	1	BArch B126.1560, Blatt 87.
931	28	2	67	1/2	BArch B126.1561, Blatt 739.
	49	B	15		BArch B102.6767, 71. Sitzung (5.6.1953),
	49	D	18		Liste W.II, Nr. 19, Prüfungs- und Begleit-
	68	A	8		bericht der Oberfinanzdirektion Nürnberg vom 21.5.1953.
945	29	1	7	1	BArch B102.1561, Blatt 512.
953	29	1	17	1	BArch B102.6753, 43. Sitzung (25.4.1952), Liste D, Nr. 23, Stellungnahme der LZB.
964	29	2	33	2	BArch B102.6747, 29. Sitzung (28.9.1951), Liste 2, Nr. 33, Stellungnahme des AHK.

Inv.-ID	Meeting	List	Case	Type	Reference for exclusion decision
979	30 43	1 D	8 23	1	BArch B102.6785, 91. Sitzung (19.3.1954), Liste W. Nr. 30, Stellungnahme der LZB.
986	39	C	15	1	BArch B126.1561, Blatt 648.
1006	30 48 56	2 D A	46 34 2	1	BArch B126.1560, Blatt 545.
1011	30 36 48 69	2 C D D	51 38 31 23	2	Gemeinde Ruggell (2012). Nordwind – Information der Gemeinde Ruggell Nr. 138, Dezember 2012, S. 18-19.
1027	30 63	2 D	72 13	2	BArch B126.1561, Blatt 727.
1064	31 31 40 40	2 2 C C	20 21 2 3	2	BArch B126.1560, Blatt 99. BArch B126.1561, Blatt 623.
1071	31 34	2 C	14 12	1	BArch B126.1560, Blatt 56.
1073	32 38 43 46	1 B D B	1 10 22 7	1	BArch B126.1560, Blatt 514. BArch B126.1560, Blatt 542. BArch B.102.6785, 91. Sitzung (19.3.1954), Liste W. Nr. 30, Stellungnahme der LZB.
1118	32 40 49 51 55 55 64 67	D B D B D D B B	5 9 5 7 10 11 15 7	1/3	BArch B102.6748, 32. Sitzung (9.11.1951), Liste D, Nr. 5, Stellungnahme der LZB. BArch B102.6736, 49. Sitzung (18.7.1952), Besprechungspunkte Liste D, Nr. 5. BArch B102.6760, 55. Sitzung (10.10.1952), Liste D, Nr. 10, Stellungnahme der LZB. BArch B102.6764, 64. Sitzung (20.2.1953), Liste B, Nr. 15, Stellungnahme der LZB. BArch B102.6738, 70. Sitzung (22.5.1953), Besprechungspunkte Liste W, Nr. 43.
1122	32	D	10	1	BArch B126.1560, Blatt 100. BArch B126.1560, Blatt 449 ff.
1133	48	D	28	1	Der Spiegel, Ausgabe 48/1955 vom 23.11.1955, S.21 „Ich verstehe schlecht“. Frankfurter Allgemeine Zeitung, Samstag, 15. März 1958, S. 17 „Sparkasse Kempten auf der Anklagebank“.
1166	33 39	D D	7 12	1	BArch B126.1560, Blatt 66.
1171	33	D	12	1	BArch B126.1561, Blatt 172.
1172	33	D	13	1	BArch B126.1560, Blatt 94.
1176	33	D	17	2	BArch B126.1560, Blatt 451.
1187	34	A	11	2	BArch B126.1561, Blatt 727-728.
1189	34	A	14	1	BArch B126.1561, Blatt 535.
1221	35	A	4	2	BArch B126.1561, Blatt 172.

Inv.-ID	Meeting	List	Case	Type	Reference for exclusion decision
1228	35	A	14	2	Bonhage B. (2001). Schweizerische Boden-kreditanstalt, Chronos Verlag, p. 75ff.
1244	35	C	7	1	Der Spiegel, Ausgabe 48/1955 vom 23.11.1955, S.21 „Ich verstehe schlecht“. Frankfurter Allgemeine Zeitung, Samstag, 15. März 1958, S. 17 „Sparkasse Kempten auf der Anklagebank“.
1248	35	C	14	1	BArch B126.1560, Blatt 556.
	82	C	3		
1299	36	B	5	1	BArch B126.1561, Blatt 212.
	37	D	8		BArch B102.6765, 66. Sitzung (20.3.1953),
	66	B	10		Liste B, Nr. 10, Stellungnahme des LWM.
1343	36	D	15	1	BArch B102.6736, Vermerk zur 37. Sitzung (25.1.1952), Seite 1 der Anlage, Liste I Nr. 7.
1344	36	D	16	2	BArch B126.1561, Blatt 585.
1366	37	B	4	1	BArch B126.1560, Blatt 93.
1377	37	C	9	1	BArch B126.1561, Blatt 172.
1398	38	A	5	1	BArch B126.1560, Blatt 57.
	38	A	6		BArch B126.1560, Blatt 51.
1401	38	A	9	1	BArch B102.6760, 57. Sitzung (7.11.1952), Liste W. Nr. 28, Stellungnahme der LZB.
1436	38	D	9	1	BArch B102.6753, 43. Sitzung (25.4.1952),
	42	D	10		Liste D, Nr. 11, Stellungnahme der LZB.
	43	D	11		BArch B102.6747, 26. Sitzung (31.8.1951),
	44	D	13		Liste 2, Nr. 45, Ermittlungsbericht der Oberfinanzdirektion Stuttgart vom 9.5.1952.
					BArch B102.6751, 38. Sitzung (8.2.1952),
					Liste D, Nr. 9, Stellungnahme der LZB.
1437	38	D	10	1	BArch B126.1560, Blatt 559.
1453	39	A	13	1	BArch B126.1560, Blatt 546.
	77	B	3		
1474	39	C	18	2	BArch B126.1560, Blatt 91.
1488	39	D	16	1	BArch B126.1560, Blatt 541.
	45	C	5		
	52	B	18		
1497	40	A	10	1	BArch B126.1561, Blatt 172.
1541	40	D	26	1	Der Spiegel, Ausgabe 48/1955 vom 23.11.1955, S.21 „Ich verstehe schlecht“. Frankfurter Allgemeine Zeitung, Samstag, 15. März 1958, S. 17 „Sparkasse Kempten auf der Anklagebank“.
1622	56	B	1	1	BArch B102.6760, 57. Sitzung (7.11.1952), Liste W. Nr. 28, Stellungnahme der LZB.
1690	44	D	1a	1/2	BArch B102.6754, 44. Sitzung (9.5.1952),
	44	D	12		Liste D, Nr. 1, Ermittlungsbericht der Oberfinanzdirektion Köln vom 14.7.1952.
					BArch B126.1560, Blatt 96.

Inv.-ID	Meeting	List	Case	Type	Reference for exclusion decision
1691	44	D	1b	1/2	BArch B102.6754, 44. Sitzung (9.5.1952), Liste D, Nr. 1, Ermittlungsbericht der Oberfinanzdirektion Köln vom 14.7.1952.
1706	44	D	23	1	BArch B126.1560, Blatt 236.
1708	44	D	25	2	Pont (2010), p. 14.
1720	45	B	13	2	National Archives of the United States, Federal Register, Volume 19, No. 80, Saturday, April 24, 1954, p. 2433.
1723	45	B	17	2	BArch B102.6754, 45. Sitzung (23.5.1952), Liste B, Nr. 17, Stellungnahme der LZB.
1741	45 59 59	D D D	23 6 7	1	BArch B102/6762, 59. Sitzung (5.12.1952), Liste D Nr. 6, Stellungnahme der Oberfinanz-direktion Nürnberg vom 9.10.1952. BArch B126.1560, Blatt 66.
1801	47	B	11	1	Frankfurter Allgemeine Zeitung, Dienstag, 4. November 1952, S. 4: „Jeder konnte Millionenbeträge aus der Kasse nehmen“. Frankfurter Allgemeine Zeitung, Donnerstag, 13. November 1952, S. 4: „Marrien: Zehn Millionen Mark illegal ins Ausland gebracht“.
1858	48 48 50 50 52 53 56 67	B D D D D D D D	30 17 14 15 12 18 11 22	1	BArch B126.1560, Blatt 58. BArch B126.1560, Blatt 97. BArch B126.1561, Blatt 200. BArch B126.1561, Blatt 472. BArch B102.6769, 73. Sitzung (3.7.1953), Liste W, Nr.48, Stellungnahme der LZB.
1907	49 49 51	B D D	8 27 15	3	BArch B102.6757, 49. Sitzung (18.7.1952), Liste D, Nr. 27, Ermittlungsbericht der Oberfinanzdirektion München vom 10.6.1953.
1937	49 65	D B	20 14	1	BArch B102.6764, 65. Sitzung (6.3.1953), Liste B, Nr. 14, Bericht der Oberfinanz-direktion Hamburg vom 5.12.1952.
1971	50	B	23	1	BArch B102.6737, Vermerk zur 51. Sitzung (15.8.1952), Liste abgelehnter Anträge, Nr. 8. BArch B126.1560, Blatt 66.
1982	50 56 60 61	B D D C	36 10 16 3	1	BArch B102.6758, 51. Sitzung (15.8.1952), Liste W, Nr. 15, Fernschreiben Bauditz an Bundesfinanzministerium vom 23.9.1953. BArch B126.1561, Blatt 99. BArch B126.1561, Blatt100.
2031	51	B	8	1	BArch B126.1560, Blatt 92.
2079	52 72 86	D D B	7 1 1	1	BArch B126.1560, Blatt 194. BArch B126.1560, Blatt 170.
2121	53	D	26	1	BArch B126.1560, Blatt 91.

Inv.-ID	Meeting	List	Case	Type	Reference for exclusion decision
2170	54	D	21	2	BArch B126.1560, Blatt 101. BArch B126.1561, Blatt 720.
2175	54	D	29	2	BArch B102.6760, 56. Sitzung (24.10.1952), Liste W, Nr. 21, Stellungnahme des LWM.
2176	54	D	30	2	BArch B102.6760, 56. Sitzung (24.10.1952), Liste W, Nr. 21, Stellungnahme des LWM.
2177	54 55 55 56 57 57 57 57 58 58 58 58 59 59 62 63 64 64 70 83	D D D D B B B D B D D D B B B D B D D D	31 12 13 9 1 2 3 17 16 36 37 38 1 2 3 10 13 19 1 31	3	BArch B102.57662, all documents following Wirtschaftsministerium Baden-Württemberg an Bundeswirtschaftsministerium Hauptabt. V betr. Ausländische Kapitalinvestitionen im Bundesgebiet, 16.10.1952. BArch B102.6737, Vermerk zur 58. Sitzung (21.11.1952), S. 3. BArch B102.6762, 61. Sitzung (9.1.1953), Liste B, Nr. 6, Bericht der Oberfinanz-direktion Bremen vom 12.12.1952.
2293	58	B	21	2	Pont (2010), p. 14.
2301	58	D	5	1/2	BArch B102.6761, 58. Sitzung (21.11.1952), Liste D, Nr. 5, Stellungnahme der LZB. BArch B126.1561, Blatt 654. BArch B126.1560, Blatt 10.
2319	61	B	8	1	Der Spiegel, Ausgabe 48/1955 vom 23.11.1955, S.21 „Ich verstehe schlecht“. Frankfurter Allgemeine Zeitung, Samstag, 15. März 1958, S. 17 „Sparkasse Kempten auf der Anklagebank“.
2400	61 67 71 71 72 72 73 74 74 75 76	B C D D D D D B B D B	6 8 8 9 21 49 33 2 3 5 13	3	BArch B102.6738, Vermerk zur 76. Sitzung (14.8.1953), p. 3. BArch B102.6737, 61. Sitzung (9.1.1953), Besprechungspunkte Liste B, Nr. 6. BArch B102.6762, 61. Sitzung (9.1.1953), Liste B, Nr. 6, Bericht der Oberfinanz-direktion Bremen vom 15.1.1953.

Inv.-ID	Meeting	List	Case	Type	Reference for exclusion decision
2424	61	D	18	1	BArch B126.1561, Blatt 184.
2429	61	D	26	2	BArch B102.6766, 69. Sitzung (8.5.1953), Liste W.III, Nr. 28, Ermittlungsbericht der Oberfinanzdirektion Hannover vom 7.3.1953.
2445	62	D	17	2	BArch B102.6763, 62. Sitzung (23.1.1953), Liste D, Nr. 17, Stellungnahme des AHK.
2474	63	B	14	1	BArch B102.6737, Vermerk zur 63. Sitzung (6.2.1953), Liste abgelehnter Anträge, Nr. 2.
2510	64	D	10	1	BArch B102.6764, 64. Sitzung (20.2.1953), Liste D, Nr. 10, Stellungnahme der LZB.
2566	66 72 85 85	B D B B	14 55 1 2	2	BArch B102.6799. 108. Sitzung (19.11.1954), Liste B, Nr. 2, Stellungnahme der LZB.
2608	66	D	35	2	BArch B102.6765, 66. Sitzung (20.3.1953), Liste D, Nr. 35, Stellungnahme der LZB.
2609	66	D	36	2	
2610	66	D	37	2	
2666	77 108	B B	1 2	2	BArch B102.6799. 108. Sitzung (19.11.1954), Liste B, Nr. 2, Stellungnahme der LZB. *Ibidem*, Brief Gardinenweberei Otto Riedel an Bundeswirtschaftsministerium vom 21.9.1954.
2724	69 103	C D	5 9	1	BArch B126.1561, Blatt 650.
2837	72	D	48	2	BArch B102.6768, 72. Sitzung (19.6.1953), Liste D, Nr. 48, Stellungnahme der LZB.
2963	76	A	2	2	BArch B102.6773, 80. Sitzung (9.10.1953), Liste W, Nr. 38, Stellungnahme der LZB.
2965	76	B	4	2	BArch B102.6780, 87. Sitzung (22.1.1954), Liste W, Nr. 25, Bericht der Oberfinanz-direktion Freiburg vom 19.1.1954.
3001	77 96	B D	4 22	1	BArch B126.1560, Blatt 546.
3179	81 81	D D	28 29	1	BArch B102.6738, 81. Sitzung (23.10.1953), Besprechungspunkte Liste D, Nr. 28. Der Spiegel, Ausgabe 40/1950 vom 4.10.1950, S. 6. „Das Geld ist weg“.
3235	83 83	B B	4 5	1	BArch B126.1560, Blatt 190.
3420	87	B	10	1	BArch B.102.6785, 91. Sitzung (19.3.1954), Liste W. Nr. 30, Stellungnahme der LZB.
3664	94	B	12	1	BArch B126.1560, Blatt 190. BArch B126.1560, Blatt 237.
3752	97	B	5	2	Pont (2010), p. 14.
3790	98 98	B B	10 11	2	BArch B126.1561, Blatt 585.
3881	101	D	10	1	BArch B126.1560, Blatt 98.

Inv.-ID	Meeting	List	Case	Type	Reference for exclusion decision
4038	107	B	5a	2	BArch B102.6739, 107. Sitzung (5.11.1954), Besprechungspunkte Liste B, Nr. 5. BArch B126.1561, Blatt 212.
4039	107	B	5b	2	
4089	108	B	101a	2	Schulz, Werner, "Heinkel, Ernst" in: Neue Deutsche Biographie 8 (1969), S. 305-306 [Online-Version]; URL: https://www.deutsche-biographie.de/pnd11854814X.html#ndbcontent
4090	108	B	101b	2	
4233	112	D	5	2	BArch B102.6801, 112. Sitzung (28.1.1955), Liste D, Nr. 5, Stellungnahme der LZB.
4457	118	B	9	2	BArch B102.6807, 118. Sitzung (29.4.1955), Liste B, Nr. 9, Stellungnahme der LZB. Uhlig et al. (2001). Tarnung, Transfer, Transit, S. 413ff.
4584	14	---	28b	2	BArch B126.1561, Blatt 606.
4585	14	---	28c	2	BArch B126.1561, Blatt 606.
	40	D	20		
	40	D	22		
	77	B	2a		

Table C.2.1.2 – Targets for fraudulent foreign intermediaries (Type 3): Advertisements by German companies in Swiss newspaper, looking for investors.

Gesucht

30 000—50 000 Sperrmark

für Fabrikerweiterung. Offerten unter Chiffre Q 4265 an die Annoncen-Abteilg. der **Neuen Zürcher Zeitung, Zürich 1.**

Sperrmark

bis 100 000 DM, bereits genehmigter Vertrag, per sofort gesucht. — Anfragen unter Chiffre W 304 der Anzeigen-Expedition **Johannes Dahlgrün, Hamburg 36, Poststraße 17.**

Source: . Neue Zürcher Zeitung, Saturday, February 28, 1953.

C.2.2 Redundant applications

Table C.2.2 – Redundant applications.

Inv.-ID	Redundant application			Reason for redundancy	Subsequent, refiled applications		
	Meeting	List	Case		Meeting	List	Case
5	2	---	6	Dismissed, (adjusted) and refiled	16	---	41
57	5	---	4	Approved, adjusted and refiled	14	---	8
	52	D	20	Withdrawn	---	---	---
72	5	---	19	Actual double-counting	7	---	15
116	7	---	14	Dismissed, (adjusted) and refiled	13	---	24
132	8	---	11	Dismissed, (adjusted) and refiled	70	B	9
141	52	D	11	Withdrawn	---	---	---
159	9	---	10	Approved, adjusted and refiled	20	2	17
171	9	---	23	Withdrawn	---	---	---
172	9	---	24	Withdrawn	---	---	---
206	15	---	50	Dismissed, (adjusted) and refiled	22	1	6
					22	1	24
					22	1	25
226	11	---	11	Dismissed, (adjusted) and refiled	19	---	28
233	11	---	21	Dismissed, (adjusted) and refiled	14	---	43
234	11	---	22	Dismissed, (adjusted) and refiled	30	1	3
281	13	---	1	Dismissed, (adjusted) and refiled	14	---	41
332	14	---	34	Dismissed, (adjusted) and refiled	24	2	68
334	14	---	37	Withdrawn	---	---	---
337	14	---	40	Dismissed, (adjusted) and refiled	16	---	6
349	46	C	36	Dismissed, (adjusted) and refiled	49	D	24
					49	D	25
354	15	---	10	Approved, adjusted and refiled	72	D	13
356	15	---	12	Dismissed, (adjusted) and refiled	19	---	4
374	17	---	41	Actual double-counting	15	---	35
440	17	---	19	Dismissed, (adjusted) and refiled	72	D	56
447	17	---	28	Approved, adjusted and refiled	19	---	63
451	17	---	32	Dismissed, (adjusted) and refiled	28	2	63
488	18	---	30	Withdrawn	---	---	---
634	21	2	45	Approved, adjusted and refiled	34	B	5
652	42	D	11	Withdrawn	---	---	---
663	22	1	31	Withdrawn	---	---	---
780	24	2	33	Dismissed, (adjusted) and refiled	55	D	25
781	36	D	13	Dismissed, (adjusted) and refiled	40	D	24
					40	D	25
788	24	2	43	Approved, adjusted and refiled	37	C	5
797	24	2	56	Actual double-counting	36	C	7

Inv.-ID	Redundant application			Reason for redundancy	Subsequent, refiled applications		
	Meeting	List	Case		Meeting	List	Case
837	69	D	3	Withdrawn	---	---	---
862	26	2	33	Withdrawn	---	---	---
922	28	2	53	Withdrawn	---	---	---
945	29	1	7	Withdrawn	---	---	---
990	62	D	16	Withdrawn	---	---	---
1014	30	2	56	Withdrawn, and later refiled	54	C	9
1074	32	1	2	Approved, adjusted and refiled	44	D	27
1119	32	D	6	Dismissed, (adjusted) and refiled	44	B	12
1140	33	B	4	Dismissed, (adjusted) and refiled	36	C	6
1217	34	D	16	Withdrawn	---	---	---
1285	36	A	3	Dismissed, (adjusted) and refiled	43	D	5
1316	40	D	36	Dismissed, (adjusted) and refiled	46	C	38
1333	36	D	1	Withdrawn	---	---	---
	36	D	2	Withdrawn	---	---	---
1347	36	D	19	Dismissed, (adjusted) and refiled	45	B	12
	45	B	12	Withdrawn	---	---	---
1480	39	D	5	Dismissed, (adjusted) and refiled	82	D	30
1554	55	D	7	Withdrawn	---	---	---
1679	44	B	1	Withdrawn	---	---	---
1698	44	D	8	Dismissed, (adjusted) and refiled	52	D	29
1758	46	B	13	Dismissed, (adjusted) and refiled	51	D	24
1782	53	D	12b	Dismissed, (adjusted) and refiled	62	D	21
	53	D	13b	Dismissed, (adjusted) and refiled			
1800	57	B	8	Dismissed, (adjusted) and refiled	86	Dev.	53
1858	56	D	11	Dismissed, (adjusted) and refiled	67	D	22
1862	48	B	38	Dismissed, (adjusted) and refiled	62	B	2
1928	49	D	3	Dismissed, (adjusted) and refiled	82	D	4
1989	50	C	3	Withdrawn, and later refiled	69	A	4
1994	50	D	2	Withdrawn	---	---	---
2018	50	D	33	Dismissed, (adjusted) and refiled	56	D	21
2077	52	D	2	Dismissed, (adjusted) and refiled	73	D	17
	52	D	3	Dismissed, (adjusted) and refiled			
2113	53	D	12a	Dismissed, (adjusted) and refiled	62	D	22
	53	D	13a	Dismissed, (adjusted) and refiled			
2159	54	D	6	Withdrawn	---	---	---
2174	54	D	28	Withdrawn, and later refiled	73	D	5
2177	54	D	31	Approved, adjusted and refiled	61	B	6
	64	B	13	Dismissed, (adjusted) and refiled	70	D	1
2469	63	B	7	Approved, adjusted and refiled	101	Dev.	113
2475	63	B	15	Approved, adjusted and refiled	81	D	1-2
2580	66	D	2	Withdrawn	---	---	---

Inv.-ID	Redundant application			Reason for redundancy	Subsequent, refiled applications		
	Meeting	List	Case		Meeting	List	Case
2599	66	D	26	Withdrawn	---	---	---
2600	66	D	27	Withdrawn	---	---	---
2664	68	B	2	Withdrawn	---	---	---
	68	B	3	Withdrawn	---	---	---
2699	68	D	29	Approved, adjusted and refiled	81	B	8
2731	69	D	4a	Dismissed, (adjusted) and refiled	82	B	9a
2732	69	D	4b	Dismissed, (adjusted) and refiled	82	B	9b
2907	74	D	9	Approved, adjusted and refiled	83	D	22a
2908	74	D	10-11	Approved, adjusted and refiled	83	D	22b
2909	74	D	12	Approved, adjusted and refiled	83	D	22c
2910	74	D	13	Approved, adjusted and refiled	83	D	22d
2947	75	B	22	Dismissed, (adjusted) and refiled	89	D	8
2948	75	B	23	Dismissed, (adjusted) and refiled	89	D	9
2968	76	B	7	Approved, adjusted and refiled	88	D	19
2992	76	D	21	Dismissed, (adjusted) and refiled	99	B	9
3015	77	D	4	Withdrawn	---	---	---
3029	77	D	27	Withdrawn, adjusted and refiled	82	B	13
3059	78	D	14	Withdrawn	---	---	---
3092	80	B	3	Dismissed, (adjusted) and refiled	92	B	1
3144	80	D	34	Withdrawn	---	---	---
3149	81	B	3	Withdrawn	---	---	---
3306	84	D	20a	Dismissed, (adjusted) and refiled	113	B	7a
3307	84	D	20b	Dismissed, (adjusted) and refiled	113	B	7b
3384	86	D	5a	Dismissed, (adjusted) and refiled	110	D	13a
3385	86	D	5b	Dismissed, (adjusted) and refiled	110	D	13b
3397	86	D	19	Approved, adjusted and refiled	107	D	16
3464	89	B	10	Withdrawn	---	---	---
3507	90	B	11	Withdrawn	---	---	---
3521	90	D	3	Withdrawn	---	---	---
	90	D	4	Withdrawn	---	---	---
3580	91	D	45	Withdrawn	---	---	---
3597	92	B	3	Withdrawn, adjusted and refiled	106	Dev.	101
3616	92	D	18	Approved, adjusted and refiled	100	Dev.	111
3780	97	Dev.	103	Withdrawn, adjusted and refiled	104	Dev.	103
	97	Dev.	104	Withdrawn, adjusted and refiled	104	Dev.	104
3968	103	Dev.	110	Withdrawn, adjusted and refiled	109	D	10
4004	105	D	6	Dismissed, (adjusted) and refiled	113	B	8
4163	111	D	13	Withdrawn	---	---	---
4223	112	B	12	Withdrawn	---	---	---
	112	B	13	Withdrawn	---	---	---
4591	30	2	70	Withdrawn, adjusted and refiled	36	C	24

C.2.3 Applications filed by actual or prospective immigrants

Table C.2.3 – Applications filed by actual or prospective immigrants.

Inv.-ID	Meeting	List	Case	Immigrant status (at time of commission decision)
101	6	---	24	Iranian national, living in Hamburg.
	8	---	29	
	20	2	9	
111	7	---	9	Iranian national, living in Hamburg.
	19	---	59	
112	7	---	10	US national, living in Munich.
133	8	---	12	French national, living in Baden-Baden.
	18	---	23	
162	9	---	13	Swiss resident, planning to move to Germany.
170	9	---	21	German emigrant, had already returned to Germany by 1953.
	33	C	14	
	78	B	9	
288	13	---	9	Iranian national, living in Hamburg.
293	13	---	16	German emigrant, planning to return to Germany.
327	14	---	29	German emigrant, had already returned in 1949. https://de.wikipedia.org/wiki/Richard_Eichberg last accessed on January 19, 2019, 6.38pm.
388	16	---	1	German emigrant, planning to return to Germany.
492	18	---	38	Had become *Deviseninländer* by October 1951 BArch B102.6736, 30. Sitzung (12.10.1951), Vermerk p. 2.
	18	---	39	
	23	2	35	
507	19	---	2	Already lived in Bremen and had applied for becoming *Deviseninländer* in November 1951. BArch B102.6753, 43. Sitzung (25.4.1952), Liste D, Nr. 6, Ermittlungsbericht der Oberfinanzdirektion Bremen vom 15.5.1952.
	19	---	3	
	43	D	6	
	43	D	7	
587	20	2	16	German emigrant, had already returned to Germany.
606	21	1	7	German emigrant, planning to return to Germany.
	24	2	41	
883	28	1	1	Dutch national, planning to move to Duisburg.
1135	33	A	12	German emigrant, planning to return to Germany.
1320	36	C	33	German refugee planning to immigrate to West Germany.
1524	40	C	15	German emigrant, planning to return to Germany.
	91	D	5	
1616	42	D	3a	German emigrant, planning to return to Germany.
	46	C	27a	
	54	C	2	
1697	44	D	7	German emigrant, planning to return to Germany.

Inv.-ID	Meeting	List	Case	Immigrant status (at time of commission decision)
1703	44	D	16	Iranian national, living in Hamburg.
	51	B	3	
1737	45	D	17	German emigrant, had returned to Germany in June 1952.
1800	47	B	10	US national, living in Starnberg, married to German national.
	57	B	8	
	86	Dev.	53	
1866	48	C	1	German emigrant, planning to return to Germany
	55	B	6	
1925	49	D	1	German emigrant, "currently in Munich", husband had lived there since 1947.
1978	50	B	31	German emigrant, planning to return to Germany.
1979	50	B	32	German emigrant, planning to return to Germany.
2054	52	B	6	Swiss national, living in Tuttlingen since May 1952, had applied for becoming *Deviseninländer*.
2131	54	A	6	German emigrant, had returned to Germany by 1952.
	61	C	7	Wümme-Zeitung, Dienstag, 13. Dezember 2011, "Ein Pfarrwitwenhaus als Kunst-Insel". Stadt Staufen (2004), Staufen Kulturwoche 2004, p.15.
2142	54	B	12	German emigrant, planning to return to Germany.
2282	58	B	10a	Resident of Austria, in fact already living in Germany.
2283	58	B	10b	Resident of Austria, in fact already living in Germany.
2300	58	D	4	German emigrant, had already returned to Germany.
2387	60	D	31	German emigrant, planning to return to Germany.
	71	B	17	
2627	67	C	9	German emigrant, planning to return to Germany.
2634	67	D	1	German emigrant, had returned to Germany by 1954.
	92	B	7	
	94	D	15	
2765	71	B	1	German emigrant, had returned to Germany by 1949. Möller H. (2003).
2824	72	D	27	German emigrant, returned to Germany in January 1954. BArch B102.6768, 72. Sitzung (19.6.1953), Liste D, Nr. 27, Ermittlungsbericht der Oberfinanzdirektion Koblenz vom 15.6.1954.
2828	72	D	32	Resident of Iraq, not living there since 1952, planning to become *Deviseninländer*.
2974	76	B	15	German emigrant, returned to Germany immediately after approval of application in June 1953. BArch B102.6771, 76. Sitzung (14.8.1953), Liste B, Nr. 15, Ermittlungsbericht der Oberfinanzdirektion Ulm vom 23.9.1954.
3110	80	B	18	German emigrant, returned to Germany in April 1953.
3174	81	D	21	German emigrant, planning to return to Germany.

Inv.-ID	Meeting	List	Case	Immigrant status (at time of commission decision)
3267	83	D	20	German emigrant, planning to return to Germany.
3286	84	C	7a	German emigrant, planning to return to Germany.
3287	84	C	7b	German emigrant, planning to return to Germany.
3288	84	C	7c	German emigrant, planning to return to Germany.
3369	86	B	3	German emigrant, returned to Germany, had just become *Deviseninländer*.
3439	88	Dev.	104	German emigrant, planning to return to Germany.
3522	90	D	6a	German emigrant, planning to return to Germany.
3523	90	D	6b	German emigrant, planning to return to Germany.
3598	92	B	5	German emigrant, planning to return to Germany.
3712	95	Dev.	108	German emigrant, planning to return to Germany.
3817	98	Dev.	106	German emigrant, planning to return to Germany.
3883	101	D	14	German emigrant, planning to return to Germany.
3950	103	D	15	German emigrant, planning to return to Germany.
4016	105	Dev.	107a	German emigrant, planning to return to Germany.
4017	105	Dev.	107b	German emigrant, planning to return to Germany.
4018	105	Dev.	107c	German emigrant, planning to return to Germany.
4021	106	B	3a	Already lived in Nuremberg, planning to apply for becoming *Deviseninländer*.
4076	108	B	8	Spanish national, already living in Frankfurt am Main.
4126	110	B	9	German emigrant, planning to return to Germany.
4337	115	D	10a	US national, already living in Munich.
4338	115	D	10b	US national, already living in Munich.
4414	117	D	7	US national, already living in Kaiserslautern.
4435	118	A	11	US national, already living in Frankfurt am Main.
4487	119	B	10	German emigrant, planning to return to Germany.
4570	122	A	5	Ethnic German refugee from Romania, planning to immigrate to Germany.

Appendix D – German emigrants

I identify investors of German origin by two methods: Either the commission records themselves contain sufficient information to the effect that I am able to plausibly assume the investor under consideration to be of German origin; or I am able to verify through other sources that the investor has been a German citizen at some point in time.

To determine the national origins of investors under the circumstances of the early 1950s imposes a number of non-trivial coding choices. The objective of the "German emigrant (origin)" indicator variable is to identify "*Auslandsdeutsche*", i.e. the group of individuals who came from Germany or had at some point been German nationals, but lived permanently abroad during the first half of the 1950s. On the background of such research objective, I identify investors with a stated location in the *Saarland* as exclusively French, and do not assign "Germanness" to them. The same is true for investors located in formerly German regions of Belgium (Eupen and Malmedy). Investors living in those areas never left Germany, but Germany rather left them, so to speak. The *Saarland* joined the Federal Republic in 1957, making the identity of its investors even more ambiguous. Moreover, Austria had been integrated into Germany between 1938 and 1945. Assigning "Germanness" to the inhabitants of the *Saarland* could justify doing the same to all Austrian investors, introducing collinearity into the data and rendering the indicator variable meaningless.

It is therefore important to note that the variable necessarily indicates only a lower bound for the group of investors of German origin.

D.1. German emigrants identifiable through the commission records

The records of the investment commission indicate the German origin of a non-resident investor principally in three ways: Firstly, the investor is directly reported to be a German national, or to have emigrated at some point in time from Germany. Secondly, the application under consideration involves the investment of restituted funds. This could take the form of spending the balance of a designated restitution account with a German bank. It could also involve reinvesting the sale proceeds of previously restituted property. Thirdly, the non-resident investor herself is the restituted owner of the German destination company. Using restitution as an identifier for the German origin of the investor is a matter of plausibility, as I cannot systematically exclude the possibility that Jewish citizens of other countries with property inside Germany were expropriated as well by the National Socialist regime during the 1930s and 1940s.

However, I expect the fraction of thus wrongfully identified investors to be very low, especially with restituted owners of German destination companies. Otherwise, there is a small number of cases in which the information provided in the records makes it extremely likely that the investor under consideration is of German origin, even if this is not explicitly stated. For example, the investor and the owner of the destination company can hardly have been in the War together ("*Kriegskameraden*") if the investors had not served as a German in the German army.

Table D.1.1 – German emigrants identifiable through the commission records.

Inv.-ID	Meeting	List	Case	Identification of emigrant status
2	2	---	3	Company owned by German emigrants
	10	---	32	
7	2	---	8	Investment from restitution account
16	2	---	18	Investment from restitution account
26	3	---	13	Investment from restitution account
28	3	---	16	Investment from restitution account
54	5	---	1	German emigrant
	46	B	11	
	53	B	9	
	72	D	22	
	87	D	2	
66	5	---	13	German emigrant
	13	---	13	
	67	C	5	
68	5	---	15	Investment of the sale proceeds of a restituted plot of land.
72	5	---	19	Investment from restitution account
	7	---	15	
76	5	---	25a	Investment from restitution account
77	5	---	25b	Investment from restitution account
81	6	---	3	Investment from restitution account
87	6	---	11	Investment from restitution account
94	6	---	17	Investment from restitution account
95	6	---	18	Investment from restitution account
	52	B	16	
96	6	---	19	Investment from restitution account
104	7	---	2	Investment from restitution account
107	7	---	5	German emigrant
	64	C	7	
127	8	---	6	German emigrant
135	8	---	14	Investment from restitution account

Inv.-ID	Meeting	List	Case	Identification of emigrant status
138	8	---	19	Investment from restitution account
141	8	---	23	German emigrant, restituted owner of investment destination.
	39	A	9	
	52	D	11	
143	8	---	25	Investment of the sale proceeds of a restituted plot of land.
145	8	---	27	Director of Elektrizitäts-AG, vorm. W. Lahmeyer, until 1935, currently member of supervisory board.
147	8	---	30	Investment from restitution account
148	8	---	32	Investment from restitution account
149	8	---	34	Investment from restitution account
163	9	---	14	Investment from restitution account
	11	---	24	
165	9	---	16	Investment from restitution account
167	9	---	18	Investment from restitution account
169	9	---	20	Investment from restitution account
	11	---	13	
170	9	---	21	German emigrant, has already returned to Germany by 1953.
	33	C	14	
	78	B	9	
171	9	---	23	German emigrant
172	9	---	24	German emigrant
177	9	---	29	Investment from restitution account
	17	---	42	Investment from restitution account
178	9	---	30	Investment from restitution account
180	9	---	33	Investment from restitution account
189	10	---	5	Investment from restitution account
190	10	---	6	German emigrant
203	10	---	19	Investment from restitution account
205	10	---	22	Investment from restitution account
212	10	---	31	Investment from restitution account
213	10	---	33	Investment from restitution account
214	10	---	34	Investment from restitution account
215	10	---	35	Investment from restitution account
216	11	---	1	Investment from restitution account
219	11	---	4	Investment from restitution account
	13	---	5	
	29	1	4b	
	65	D	30b	
	65	D	31	
	96	D	17b	
220	11	---	5	Investment from restitution account
	11	---	14	

Inv.-ID	Meeting	List	Case	Identification of emigrant status
220	13	---	11	Investment from restitution account
226	11	---	11	Investment from restitution account
	19	---	28	
235	11	---	23	Investment from restitution account
239	11	---	28	German merchant from Darmstadt.
	23	2	63	
241	11	---	30	German emigrant
	20	2	19	
245	11	---	36	Investment from restitution account
246	11	---	37	Investment from restitution account
247	11	---	38	Investment from restitution account
248	11	---	39	Investment from restitution account
	59	D	11	
	77	C	1	
	98	D	8	
249	11	---	40	Investment from restitution account
250	11	---	41	Investment from restitution account
251	11	---	42	Investment from restitution account
253	12	---	4	Investment from restitution account
254	12	---	5	Investment from restitution account
	15	---	16	
256	12	---	7a	Investment from restitution account
257	12	---	8	Investment from restitution account
258	12	---	9	Investment from restitution account
261	12	---	12	Investment from restitution account
262	12	---	13	Investment from restitution account
263	12	---	14	German emigrant
269	12	---	20	Investment of the sale proceeds of a restituted plot of land.
270	12	---	21	Investment from restitution account
272	12	---	24	Investment from restitution account
273	12	---	25	Investment from restitution account
274	12	---	26	Investment from restitution account
275	12	---	27	Investment from restitution account
276	12	---	28	Investment from restitution account
280	12	---	32	Investment from restitution account
282	13	---	2	German emigrant
	13	---	12	
289	13	---	10	Investment from restitution account
292	13	---	15	Investment from restitution account
293	13	---	16	German emigrant
294	13	---	17	Investment from restitution account

Inv.-ID	Meeting	List	Case	Identification of emigrant status
299	13	---	23	Investment from restitution account
310	14	---	7	Investment from restitution account
313	14	---	14	Investment from restitution account
316	14	---	17	Investment from restitution account
317	14	---	18	Investment from restitution account
	23	2	65	
320	14	---	21	Investment from restitution account
321	14	---	22	Investment from restitution account
323	14	---	24	Investment from restitution account
326	14	---	28a	Investment from restitution account
329	14	---	31	Investment from restitution account
330	14	---	32	Investment from restitution account
331	14	---	33	Investment from restitution account
	21	2	42	
332	14	---	34	Investment from restitution account
335	14	---	38	Investment from restitution account
336	14	---	39	Investment from restitution account
341	14	---	46	Company is owned by company under German
	19	---	43	ownership (Inv.-ID 1782)
348	15	---	4	German emigrant
350	15	---	6	Investment from restitution account
358	15	---	15	Investment from restitution account
361	15	---	19	Investment from restitution account
	17	---	25	
362	15	---	20	Investment from restitution account
363	15	---	21	Investment from restitution account
364	15	---	22	Investment from restitution account
372	15	---	32	Investment from restitution account
	44	D	5	
	61	D	7	
	97	B	11	
385	15	---	51	Investment from restitution account
388	16	---	1	German emigrant
399	16	---	13	Investment from restitution account
	16	---	15	
	57	B	16	
400	16	---	14	Investment from restitution account
406	16	---	21	Investment from restitution account
423	16	---	43	Investment from restitution account
424	16	---	44	Investment from restitution account
428	17	---	3	German emigrant
	21	1	12	

Inv.-ID	Meeting	List	Case	Identification of emigrant status
446	17	---	26	Investment from restitution account
448	17	---	29	Investment from restitution account
457	17	---	38	Investment from restitution account
472	18	---	11	German emigrant
	33	B	3	
	42	B	14	
483	18	---	25	Investment from restitution account
484	18	---	26	Investment from restitution account
485	18	---	27	Investment from restitution account
486	18	---	28	Investment from restitution account
521	19	---	22	Investment from restitution account
525	19	---	26	German emigrant
	70	C	1	
527	19	---	29	Investment from restitution account
528	19	---	30	Investment from restitution account
530	19	---	33	Investment of the sale proceeds of a restituted plot of land.
554	19	---	64	Investment from restitution account
555	19	---	65	Investment from restitution account
556	19	---	66	Investment from restitution account
572	20	1	18	Investment from restitution account
573	20	1	19	Investment from restitution account
	54	D	3	
587	20	2	16	German emigrant
603	21	1	3	German emigrant
	21	1	4	
606	21	1	7	German emigrant
	24	2	41	
676	22	2	46	German emigrant
685	22	2	59	Investment from restitution account
716	23	1	34	Investment from restitution account
757	24	1	3	German emigrant
	24	1	4	
	45	B	8	
760	24	1	6	German emigrant, restituted owner of investment destination.
766	24	1	14	German emigrant
	24	2	82	
819	24	2	83	German emigrant
862	26	2	33	Investment from restitution account
	61	C	6	

Inv.-ID	Meeting	List	Case	Identification of emigrant status
887	28	1	9	German emigrant
	93	D	4	
893	28	1	18	German emigrant
	85	B	22	
898	28	1	26	German emigrant
	65	D	20	
903	28	1	32	Investment from restitution account
919	28	2	50	Investment from restitution account
921	28	2	52	Investment from restitution account
923	28	2	54	German emigrant
	28	2	55	
925	28	2	59	German emigrant
970	29	2	39	Restituted owner of destination company
	37	D	7	
972	29	2	41	German emigrant
	60	D	3	
	60	D	4	
	116	D	22	
974	30	1	1	Company is owned by company under German ownership (Inv.-ID 1782)
975	30	1	2	German emigrant
	50	B	39	
981	30	1	10	German emigrant
	38	D	4	
	38	D	5	
	49	B	18	
	49	B	19	
982	30	1	11	German emigrant
	55	C	9	
984	30	1	14	German emigrant
992	30	2	25	German emigrant
1000	30	2	37	German emigrant
1002	30	2	39	German emigrant
1003	30	2	40	German emigrant
	30	2	41	
1009	30	2	49	German emigrant
1055	31	1	8	German emigrant
	31	1	9	
1068	31	2	8	Restituted owner of destination company
	31	2	9	
1076	32	1	4	German emigrant
1135	33	A	12	German emigrant

Inv.-ID	Meeting	List	Case	Identification of emigrant status
1145	33	C	4	German emigrant
1188	34	A	13	German emigrant
	85	B	23	
1251	35	C	17	German emigrant
1257	35	C	22	
1284	36	A	2	German emigrant
	39	A	1	
1289	36	A	7	German emigrant
1306	36	C	16	German emigrant
	51	D	18	
1313	36	C	23	German merchant
	55	B	17	
	73	D	13	
	73	D	14	
	73	D	15	
	73	D	16	
1320	36	C	33	German refugee, temporarily resident of Austria.
1358	37	A	10	German emigrant
	61	D	25	
1361	37	A	14	Investment from restitution account
1376	37	C	8	Investment from restitution account
	56	A	1	
1383	37	D	1	Investment from restitution account
	42	A	7	
1404	38	A	12	German emigrant
1416	38	C	1	German merchant
	54	C	3	
	87	D	8	
	95	Dev.	104	
1421	38	C	5	Investment from restitution account
	45	D	29	
1447	39	A	3	German emigrant
1453	39	A	13	German emigrant
	77	B	3	
1464	39	C	3	Investment from restitution account
1471	39	C	14	Investment from restitution account
1524	40	C	15	German emigrant
	91	D	5	
1525	40	C	17	German emigrant
	65	D	10b	
1538	40	D	17	German emigrant

Inv.-ID	Meeting	List	Case	Identification of emigrant status
1539	40	D	21	Investment from restitution account
	77	B	2b	
1540	40	D	23	Investment from restitution account
1542	40	D	27	German emigrant
	72	D	38	
1555	41	B	5	German emigrant
1576	41	D	2	Restituted owner of destination company.
	41	D	3	
1580	41	D	10	German emigrant
1596	42	B	5	Restituted owner of destination company.
1601	42	B	15	German emigrant
1607	42	C	4	German emigrant
1616	42	D	3a	German emigrant
	46	C	27a	
	54	C	2	
1618	42	D	4	Children of restituted owner of destination
1619	42	D	5	Restituted owner of destination company.
	42	D	6	
1636	43	A	9	German emigrant
	43	A	10	
1651	43	B	6	German emigrant
1669	43	D	16	German emigrant
1697	44	D	7	German emigrant
1709	45	A	2	German emigrant
1726	45	C	2	Investment from restitution account
1737	45	D	17	German emigrant
1745	45	D	30	German merchant
1760	46	C	3	Investment from restitution account
	77	A	2	
1812	47	D	4	German emigrant
	107	D	12	
	113	D	27	
1828	47	D	28	German emigrant
1830	47	D	31	Investment from restitution account
1833	48	A	3	German emigrant
	119	A	5	
1850	48	B	19	German emigrant
1858	48	D	17	German emigrant
	53	D	18	
1861	48	B	36	German emigrant
	48	B	37	
	73	D	28	

Inv.-ID	Meeting	List	Case	Identification of emigrant status
1861	92	B	16	German emigrant
1866	48	C	1	German emigrant
	55	B	6	
1892	48	D	24	Investment from restitution account
1897	48	D	37	Restituted owner of destination company.
1912	49	B	16	German emigrant
	87	B	5	
1925	49	D	1	German emigrant
1926	49	D	2a	Restituted owner of destination company.
1940	49	D	31	German emigrant
1944	50	A	2	German emigrant
	112	D	18	
1974	50	B	27	Investment from restitution account
1978	50	B	31	German emigrant.
1979	50	B	32	German emigrant.
1981	50	B	35	Investment from restitution account
1993	50	D	1	Restituted owner of destination company.
2001	50	D	6	German emigrant owner of investing company.
2077	52	D	2	German emigrant
	52	D	3	
	73	D	17	
2127	54	A	2	Restituted owner of destination company.
2142	54	B	12	German emigrant
2191	55	B	9	German emigrant
2192	55	B	10	Investment from restitution account
	55	B	11	
	60	C	3a	
2224	56	C	1	German emigrant
2238	56	D	13	Investment from restitution account
2241	56	D	16	Investment from restitution account
2253	57	B	18	Investment from restitution account
2254	57	B	19	German merchant
2263	57	D	9	Investment from restitution account
2272	57	D	23	German emigrant
	87	C	1	
2277	58	B	4a	Restituted owner of destination company.
2280	58	B	8	German emigrant
2284	58	B	11a	Restituted owner of destination company.
2285	58	B	11b	Restituted owner of destination company.
2286	58	B	11c	Restituted owner of destination company.
2288	58	B	15	German emigrant
2300	58	D	4	German emigrant

Inv.-ID	Meeting	List	Case	Identification of emigrant status
2322	58	D	35	German emigrant
2327	59	B	8	German emigrant
2329	59	B	15	German emigrant
2335	59	D	1	Investment of restitution claims.
2358	60	B	16	German emigrant
2360	60	C	3b	Restituted owner of German companies.
2362	60	C	7	Restituted owner of destination company.
2385	60	D	29	Company of restituted owners of destination company.
2387	60	D	31	German emigrant
	71	B	17	
2389	60	D	33	German emigrant
2426	61	D	22	German emigrant
2439	62	D	8	German emigrant
2480	63	C	6a	Investment from restitution account
2481	63	D	3	German emigrant
2510	64	D	10	Investment from restitution account
2537	65	D	10a	German emigrant
2554	65	D	33	German emigrant
2580	66	D	2	Investment from restitution account
2582	66	D	4	Investment from restitution account
	66	D	5	
	73	D	18	
	76	B	3	
	82	D	26	
2627	67	C	9	German emigrant
2634	67	D	1	German emigrant
	92	B	7	
	94	D	15	
2639	67	D	6	German emigrant
2676	68	C	9	Investment from restitution account
2677	68	C	10	Investment from restitution account
2680	68	D	6a	Restituted owner of destination company.
2696	68	D	24	Restituted owner of destination company.
2697	68	D	26	German emigrant
2721	69	B	7a	German emigrant
2736	69	D	14	Investment from restitution account
	110	B	6	
	112	D	4	
2764	71	A	6	German emigrant
2780	71	D	6	German emigrant
2824	72	D	27	German emigrant

Inv.-ID	Meeting	List	Case	Identification of emigrant status
2912	74	D	15	German emigrant
2917	74	D	21	Investment from restitution account
2919	74	D	23	German emigrant
2923	74	D	30	German emigrant
	85	B	5	
2945	75	B	18	German emigrant
	75	B	19	
2946	75	B	20	German emigrant
2952	75	D	4	German emigrant
2964	76	B	1	German emigrant
	76	B	2	
2974	76	B	15	German emigrant
2984	76	D	10	German emigrant
3000	77	A	1	Investment of the sale proceeds of a restituted plot of land.
3007	77	B	12	German emigrant
3048	78	B	14	German emigrant
	81	B	18	
3097	80	B	6	German emigrant
3110	80	B	18	German emigrant
3115	80	D	3	German emigrant
	93	B	10	
3174	81	D	21	German emigrant
3181	82	A	2	Restituted owner of destination company
3205	82	B	26	German emigrant
3246	83	B	23	German emigrant
3252	83	C	2	Investment from restitution account
3259	83	D	7	German emigrants
3265	83	D	15	German merchant
3267	83	D	20	German emigrant
3284	84	C	4	Investment of the sale proceeds of a restituted plot of land.
3286	84	C	7a	German emigrant
3287	84	C	7b	German emigrant
3288	84	C	7c	German emigrant
3329	85	B	26	Investment from restitution account
3346	85	D	18a	Investing company owned by restituted individuals.
3347	85	D	18b	Investment from restitution account
3365	85	D	40	German emigrant
3366	85	D	41	German emigrant
3369	86	B	3	German emigrant
3375	86	B	14	Restituted owners of destination company.
3379	86	D	1	German emigrant

Inv.-ID	Meeting	List	Case	Identification of emigrant status
3419	87	B	9	German emigrant
3424	87	D	7a	Restituted owner of destination company
3425	87	D	7b	Restituted owner of destination company
3431	87	D	18	German emigrant
3439	88	Dev.	104	German emigrant
3478	89	D	10a	German emigrant
3479	89	D	10b	German emigrant
3509	90	B	14	German emigrant
3522	90	D	6a	German emigrant
3523	90	D	6b	German emigrant
3524	90	D	6c	German emigrant
3542	91	B	1a	German emigrant
3543	91	B	1b	German emigrant
3598	92	B	5	German emigrant
3615	92	D	17	Investor and owner of destination company are “wartime comrades”.
3660	94	B	7	Restituted owner of destination company.
3666	94	B	14	German emigrant
3712	95	Dev.	108	German emigrant
3776	97	D	18a	Investment from restitution account
3777	97	D	18b	Investment from restitution account
3791	98	B	12	German emigrant
3817	98	Dev.	106	German emigrant
3829	99	D	4	Restituted owner of German company
3863	100	Dev.	114	German emigrant
3874	101	B	7b	German emigrant
3883	101	D	14	German emigrant
3911	102	D	13	German emigrant
3915	102	D	16a	Investment from restitution account
3916	102	D	16b	Investment from restitution account
3917	102	D	16c	Investment from restitution account
3950	103	D	15	German emigrant
3956	103	D	21a	Reinvestment of restitution claim by former owner.
3978	104	D	2a	German emigrant
3979	104	D	2b	German emigrant
3980	104	D	3	German emigrant
3981	104	D	4	German emigrant
3994	105	B	3a	German emigrant
3995	105	B	3b	German emigrant
3996	105	B	3c	German emigrant
4016	105	Dev.	107a	German emigrant
4017	105	Dev.	107b	German emigrant

Inv.-ID	Meeting	List	Case	Identification of emigrant status
4018	105	Dev.	107c	German emigrant
4037	107	B	4	German emigrant
	111	D	21	
4047	107	D	2a	Restituted owner of destination company
4048	107	D	2b	Restituted owner of destination company
4049	107	D	2c	Restituted owner of destination company
4050	107	D	2d	Restituted owner of destination company
4058	107	D	5	German emigrant
4065	107	D	13	German emigrant
4072	108	B	5	Restituted owner of destination company
4081	108	D	5	German emigrant
4089	108	Dev.	101a	German resident of Liechtenstein since 1953
4090	108	Dev.	101b	German resident of Liechtenstein since 1953
4126	110	B	9	German emigrant
4156	111	D	9a	Restituted owner of destination company
4157	111	D	9b	Restituted owner of destination company
4158	111	D	9c	Restituted owner of destination company
4159	111	D	9d	Restituted owner of destination company
4160	111	D	9e	Restituted owner of destination company
4193	111	D	41a	Restituted owner of destination company
	111	D	42a	
4194	111	D	41b	Restituted owner of destination company
	111	D	42b	
4195	111	D	41c	Restituted owner of destination company
	111	D	42c	
4196	111	D	41d	Restituted owner of destination company
	111	D	42d	
4197	111	D	41e	Restituted owner of destination company
	111	D	42e	
4198	111	D	41f	Restituted owner of destination company
	111	D	42f	
4202	111	D	48a	German emigrant
4230	112	D	1a	German emigrant
4231	112	D	1b	German emigrant
4246	112	D	16	Investment from restitution account
4282	113	D	16	German emigrant
	113	D	17	
4313	114	D	6	German emigrant
4318	114	D	14	German emigrant
	114	D	15	
4321	114	D	17b	German merchant
4346	115	D	18	German emigrant

Inv.-ID	Meeting	List	Case	Identification of emigrant status
4364	116	B	7	Investment of restitution claim.
4368	116	B	11a	German emigrant
4369	116	B	11b	German emigrant
4391	116	D	13	German emigrant
4395	116	D	16	German emigrant
4427	118	A	1	German emigrant
4456	118	B	8	German merchant
4474	119	A	14	German emigrant
4481	119	B	4	Restituted owner of destination company.
4487	119	B	10	German emigrant
4554	121	B	6a	German emigrant
4555	121	B	6b	German emigrant
4556	121	B	6c	German emigrant
4557	121	B	6d	German emigrant
4558	121	B	6e	German emigrant
4559	121	B	6f	German emigrant
4560	121	B	6g	German emigrant
4573	13	---	5	Investment from restitution account
4574	13	---	5	Investment from restitution account
4584	14	---	28b	Investment from restitution account
4585	14	---	28c	Investment from restitution account
	40	D	20	
	40	D	22	
	77	B	2a	
4592	17	---	20b	German emigrant
4614	49	D	2b	Restituted owner of destination company
4621	60	C	3c	Restituted owner of German company.
4627	68	D	6b	Restituted owner of destination company
4628	68	D	6c	Restituted owner of destination company
4629	68	D	6d	Restituted owner of destination company
4630	68	D	6e	Restituted owner of destination company
4631	69	B	7b	German emigrant
4632	69	B	7c	German emigrant
4643	12	---	7b	Investment from restitution account
4648	63	C	6b	Investment from restitution account

D.2. German emigrants identifiable through other sources

More often than not, the commission records reveal little about the personal identity of the non-resident investor, beyond her prior relationship with the destination company or its owners. In this context, family relations between the investor and the German destination are ceteris paribus insufficient to establish the origin of the investor from Germany. For example, an American cousin of the owner of the destination company could have been born already, so to speak, in the United States, rendering her "Germanness" ambiguous. I therefore apply two independently sufficient conditions for identifying German origin through sources outside of the commission records: Either I can establish that the non-resident investor had been a German citizen at any point in her life; or I can establish that she was born in Germany. For example, members of merchant families from Bremen might have been born in South America, but were German merchants retaining the country's citizenship. Similarly, I assume that a US investor, for whom I can establish that she was born in the United States, had always been a US citizen and therefore never German, regardless of whether she might have self-identified as an ethnic German due to her family background.

For determining whether the investor under consideration was of German origin according to my definition, I relied on a variety of sources, which I reference in full in Table D.2.1. Archival material which does not come from the German Federal Archives (BArch) is taken from two family research website: www.ancestry.com and www.fold3.com. These websites provide scans of the archival material, which I have copied and which I am able to provide to interested readers upon request. Each document referenced in Table D.2.1 is cited in the way suggested by ancestry.com and fold3.com respectively. Every other online source used has been printed out and can equally be provided to interested readers upon request. For reasons of space, I use the following abbreviations in Table D.2.1: M for Meeting (number); L for List; C for Case on List.

Table D.2.1 – German emigrants identifiable through other sources.

Inv.-ID	M	L	C	Identification of emigrant status
5	2 16	--- ---	6 41	*Passenger and Crew Lists of Vessels Arriving at New York, New York, 1897-1957.* Microfilm Publication T715, 8892 rolls. NAI: 300346. Records of the Immigration and Naturalization Service; National Archives at Washington, D.C. - Year: *1939*; Arrival: *New York, New York*; Microfilm Serial: *T715, 1897-1957*; Microfilm Roll: *Roll 6281*; Line: *2*; Page Number: *192* National Archives and Records Administration (NARA); Washington, DC; *Name Index of Jews Whose German Nationality Was Annulled by the Nazi Regime (Berlin Documents Center)*; Record Group: *242, National Archives Collection of Foreign Records Seized, 1675 - 1958*; Record Group ARC ID: *569*; Publication Number: *T355*; Roll: *7, Mosbacher, Eduard – Schafranek, Bruno* Hessisches Hauptstaatsarchiv; Wiesbaden, Deutschland; Bestand: *903*

Inv.-ID	M	L	C	Identification of emigrant status
15	2	---	17	Oberlin College Archives, Wolfgang and Ursula Stechow Papers, 1894-1998 http://oberlinarchives.libraryhost.com/?p=collections/ controlcard&id=323 Last accessed on January 18, 2019, 10.57am.
20	3	---	6	http://www.eyearbook.com/yearbooks/Wagner_College_Kallista_Yearbook/1965/Page_10.html Last accessed on January 18, 2019, 11.03am.
23	3	---	9	National Archives at Chicago; Chicago, Illinois; ARC Title: *Illinois, Petitions for Naturalization, 1906-1991*; NAI Number: *593882*; Record Group Title: *Records of District Courts of the United States, 1685-2009*; Record Group Number: *RG 21* The National Archives at Washington, D.C.; Washington, D.C.; *Manifests of Alien Arrivals at Buffalo, Lewiston, Niagara Falls, and Rochester, New York, 1902-1954*; Record Group Title: *Records of the Immigration and Naturalization Service, 1787 - 2004*; Record Group Number: *85*; Series Number: *M1480*; Roll Number: *032*
33	4 4 49 61 87	--- --- D D B	2 3 9 21 12	https://www2.clarku.edu/offices/leir/about.cfm Last accessed on January 18, 2019, 11.15am. https://en.wikipedia.org/wiki/Henry_J._Leir Last accessed on January 18, 2019, 11.15am.
41	4	---	10	*Passenger and Crew Lists of Vessels Arriving at New York, New York, 1897-1957*. Microfilm Publication T715, 8892 rolls. NAI: 300346. Records of the Immigration and Naturalization Service; National Archives at Washington, D.C. - Year: *1912*; Arrival: *New York, New York*; Microfilm Serial: *T715, 1897-1957*; Microfilm Roll: *Roll 1896*; Line: *2*; Page Number: *9.* Staatsarchiv Hamburg; Hamburg, Deutschland; *Hamburger Passagierlisten*; Microfilm No.: *K_1859.* Ancestry.com. *Rio de Janeiro, Brazil, Immigration Cards, 1900-1965* [database on-line]. Lehi, UT, USA: Ancestry.com Operations, Inc., 2016. Welt am Sonntag, Sonntag, 28. November 2004, „Eine Villa, wie es in Hamburg keine zweite gibt“.
46	4	---	17	https://www.carlkammerling.com/about_us/company_history/ Last accessed on January 18, 2019, 1.46pm.
60	5 34 34 49 54 54 73	--- D D B B D B	7a 8a 10 22 15 25 5a	https://de.wikipedia.org/wiki/Henry_Goverts Last accessed on January 18, 2019, 2.02pm.
73	5	---	20	https://de.wikipedia.org/wiki/Gustav_Pielstick Last accessed on January 18, 2019, 2.30pm.
120	7 45	--- D	21 1	*Passenger and Crew Lists of Vessels Arriving at New York, New York, 1897-1957*. Microfilm Publication T715, 8892 rolls. NAI: 300346. Records of the Immigration and Naturalization Service; National Archives at Washington, D.C. - Year: *1931*; Arrival: *New York, New York*; Microfilm Serial: *T715, 1897-1957*; Microfilm Roll: *Roll 5031*; Line: *5*; Page Number: *14* New York City Municipal Archives; New York, New York; Borough: *Manhattan*; Volume Number: *2*, Index to Marriages, New York City Clerk's Office, New York, New York.
129	8	---	8	United States of America, Bureau of the Census. *Fifteenth Census of the United States, 1930*. Washington, D.C.: National Archives and Records Administration, 1930. T626, 2,667 rolls. - Year: *1930*; Census Place: *Manhattan, New York, New York*; Page: *27B*; Enumeration District: *1230*; FHL microfilm: *2341316* Ancestry.com. *U.S. City Directories, 1822-1995* [database on-line]. Provo, UT, USA: Ancestry.com Operations, Inc., 2011.

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136	8 70	--- B	16 13	United States of America, Bureau of the Census. *Sixteenth Census of the United States, 1940*. Washington, D.C.: National Archives and Records Administration, 1940. T627, 4,643 rolls. - Year: *1940*; Census Place: *Elizabeth, Union, New Jersey*; Roll: *m-t0627-02400*; Page: *6B*; Enumeration District: *23-90*
144	8	---	26	https://de.wikipedia.org/wiki/Hermann_Sch%C3%BClein Last accessed on January 18, 2019, 3.47pm.
155	9	---	6	NARA M1928. Records of the German External Assets Branch of the U.S. Allied Commission for Austria (USACA) Section, 1945-1950, Roll 0030.
175	9 26	--- 2	27 40	Hamburger Abendblatt, Freitag, 11. Januar 2008. „Ein Hausmeister schreibt Geschichte".
176	9	---	28	https://de.wikipedia.org/wiki/Claude_Dornier Last accessed on January 18, 2019, 5.09pm.
193	10	---	10	https://andina.bayer.com/es/acerca-de-bayer/nuestra-region/colombia/ Last accessed on January 18, 2019, 5.21pm.
199	10	---	15	National Archives at Chicago; Chicago, Illinois; ARC Title: *Illinois, Petitions for Naturalization, 1906-1991*; NAI Number: *593882*; Record Group Title: *Records of District Courts of the United States, 1685-2009*; Record Group Number: *RG 21*.
211	10	---	30	The National Archives at Seattle; Seattle, Washington; *Petitions for Naturalization*; Record Group Number: *21*.
217	11	---	2	The National Archives at Washington, D.C.; Washington, D.C.; Title of Series: *Passenger and Crew Manifests of Airplanes Arriving at Miami, Florida.*; NAI-Number: *2788541*; Record Group Title: *Records of the Immigration and Naturalization Service, 1787 – 2004;* Record Group Number: *85*.
222	11	---	7	https://de.wikipedia.org/wiki/Fred_Adlm%C3%BCller last accessed on January 18, 2019, 10.08pm.
224	11 14 109 111	--- --- D B	9 27 2a 12a	Ancestry.com. Rio de Janeiro, Brazil, Immigration Cards, 1900-1965 [database on-line]. Lehi, UT, USA: Ancestry.com Operations, Inc., 2016. https://de.wikipedia.org/wiki/Walter_AG last accessed on January 18, 2019, 10.15pm.
277	12	---	29	http://www.plbg.de/haeuserbuch/paulmann.htm Last accessed on January 19, 2019, 5.50pm. *Passenger and Crew Lists of Vessels Arriving at New York, New York, 1897-1957.* Microfilm Publication T715, 8892 rolls. NAI: 300346. Records of the Immigration and Naturalization Service; National Archives at Washington, D.C. - Year: *1939*; Arrival: *New York, New York*; Microfilm Serial: *T715, 1897-1957*; Microfilm Roll: *Roll 6282*; Line: *1*; Page Number: *16*.
287	13	---	8	https://de.wikipedia.org/wiki/Ernst_Eulenburg_(Musikverlag) last accessed on January 19, 2019, 5.55pm. https://de.schott-music.com/eulenburg/ueber-eulenburg last accessed on January 19, 2019, 5.55pm.
307	14 76 121	--- D B	3 2 13	https://de.wikipedia.org/wiki/Edmund_Stinnes last accessed on January 19, 2019, 6.03pm.
314	14 111	--- D	15 53	NARA Record Group 260, M1946, Records Concerning the Central Collecting Points ("Ardelia Hall Collection"): Munich Central Collecting Point, 1945-1951, Roll 0064.
318	14 37 40 61	--- C A C	19 17 5 5	*Passenger and Crew Lists of Vessels Arriving at New York, New York, 1897-1957.* Microfilm Publication T715, 8892 rolls. NAI: 300346. Records of the Immigration and Naturalization Service; National Archives at Washington, D.C. - Year: *1936*; Arrival: *New York, New York*; Microfilm Serial: *T715, 1897-1957*; Microfilm Roll: *Roll 5829*; Line: *2*; Page Number: *191*.
327	14	---	29	https://de.wikipedia.org/wiki/Richard_Eichberg last accessed on January 19, 2019, 6.38pm.

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359	15	---	17	https://de.wikipedia.org/wiki/Rudolf_Kaulla last accessed on January 19, 2019, 7.18pm.
360	15	---	18	https://de.wikipedia.org/wiki/Henri_Deterding last accessed on January 19, 2019, 7.33pm.
377	15 17 28 28 69 74 121	--- --- 1 1 D D A	41 5 6 7 30 29 13	http://www.reichhold.com/about.aspx?aboutID=3 last accessed on January 19, 2019, 7.43pm.
425	16 67	--- D	45 10	https://www.hessischeswirtschaftsarchiv.de/bestaende/einzeln/0113.php; last accessed on January 19, 2019, 8.08pm.
440	17 72	--- D	19 56	The National Archives at Washington, D.C.; Washington, D.C.; Series Title: *Passenger and Crew Lists of Vessels and Airplanes Departing from New York, New York, 07/01/1948-12/31/1956*; NAI Number: *3335533*; Record Group Title: *Records of the Immigration and Naturalization Service, 1787-2004*; Record Group Number: *85*; Series Number: *A4169*; NARA Roll Number: *88.*
449	17	---	30	Mehring (2009), p. 659 [Footnote 46].
551	19	---	60	Original data: United States of America, Bureau of the Census. *Fifteenth Census of the United States, 1930*. Washington, D.C.: National Archives and Records Administration, 1930. T626, 2,667 rolls. - Year: *1930*; Census Place: *Queens, Queens, New York*; Page: *8A*; Enumeration District: *0251*; FHL microfilm: *2341328.*
559	20	1	2	http://www.industrie.lu/rother.html last accessed on January 19, 2019, 8.52pm.
565	20 44 122	1 D A	9 6 6	https://obittree.com/obituary/us/new-york/brewster/beecher-funeral-home/rolf-fein/900466/ last accessed on January 19, 2019, 8.57pm.
581	20 38 38	2 B B	6 2 3	The National Archives at St. Louis; St. Louis, Missouri; *World War II Draft Cards (Fourth Registration) for the State of New York*; Record Group Title: *Records of the Selective Service System, 1926-1975*; Record Group Number: *147*; Box or Roll Number: *459.* http://www.bendorf-geschichte.de/bdf-0132.htm last accessed on January 19, 2019, 9.05pm.
583	20	2	8	http://familienbuch-euregio.eu/genius/php/show.php?tab=1&tid=&sub=PublicAll&det=14876&eworec=0&bar=1&ssm=&sid=8984b861b3075f906366337b16e89d2f&rid=&mod=&findlist=&lis=&tm=1547981343313 last accessed on January 20, 2019, 11.50am.
597	20	2	31	https://www.liebers.de/de/daten-und-ereignisse2 last accessed on January 20, 2019, 11.58am.
628	21 26 57	2 2 D	34 54 21	https://de.wikipedia.org/wiki/Manfred_Curry last accessed on January 20, 2019, 12.04pm.
638	21 22 37 70 71 92	2 2 B B B D	50 49 9 14 13 13	https://www.bristol-stiftung.ch/index.php4?page=&nav=3 last accessed on January 20, 2019, 12.07pm.
650	22	1	12	Ancestry.com. *Rio de Janeiro, Brazil, Immigration Cards, 1900-1965* [database on-line]. Lehi, UT, USA: Ancestry.com Operations, Inc., 2016.

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652	22 42 42 69 74 84 87 87 87 87 89 93 109 110 110 121	1 A D B B D B D D D D B B B B A	16 4 11 9 6 5 6 4 5 6 15 12 5 1 2 2	Hug (2002), p. 144ff, p. 181.
670	22	2	38	*Passenger and Crew Lists of Vessels Arriving at New York, New York, 1897-1957.* Microfilm Publication T715, 8892 rolls. NAI: 300346. Records of the Immigration and Naturalization Service; National Archives at Washington, D.C. - Year: *1927*; Arrival: *New York, New York*; Microfilm Serial: *T715, 1897-1957*; Microfilm Roll: *Roll 4029*; Line: *6*; Page Number: *217*. National Archives and Records Administration; Washington, DC; ARC Title: *Index to Petitions for Naturalizations Filed in Federal, State, and Local Courts in New York City, 1792-1906*; NAI Number: *5700802*; Record Group Title: *Records of District Courts of the United States, 1685-2009*; Record Group Number: *RG 21*.
686	22 44 45	2 D D	60 28 7	BArch B126.1561, Blatt 212. Der Spiegel, Nr. 39, 24. September 1952, „…setzte auf Deutschland“.
688	22	2	63	www.ticinarte.ch/index.php/emden-max.html?file=tl_files/Bereiche/Personen/Emden-Wuerstchen.pdf last accessed on January 20, 2019, 1.05pm. https://www.tagesanzeiger.ch/kultur/buecher/Der-Sonnenkoenig-des-Lago-Maggiore/story/28546286 last accessed on January 20, 2019, 1.06pm.
728	23	2	46	Ancestry.com. *Rio de Janeiro, Brazil, Immigration Cards, 1900-1965* [database on-line]. Lehi, UT, USA: Ancestry.com Operations, Inc., 2016.
731	23	2	49	https://de.schott-music.com/about/history last accessed on January 20, 2019, 1.09pm.
734	23	2	54	BArch B126.1560, Blatt 512.
750	23	2	73	AJR Information volume IV, No. 1, January 1949, p. 3: “Restitution Organisation at Work”.
781	24 36 40 40	2 D D D	34 13 24 25	The National Archives of the UK; Kew, Surrey, England; *Board of Trade: Commercial and Statistical Department and successors: Inwards Passenger Lists.*; Class: *BT26*; Piece: *1342*.
789	24	2	45	https://de.wikipedia.org/wiki/Hans_Gerling last accessed on January 20, 2019, 2.13pm. Der Spiegel, Nr. 17, 23. April 1958, „Der Bruderkrieg“.
798	24 38 72	2 D D	58 1 17	https://de.wikipedia.org/wiki/Gottfried_Bermann_Fischer last accessed on January 20, 2019, 2.18pm.

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800	24 117	2 D	60 1b	http://www.eversfield.de/gestuet/historie.htm last accessed on January 20, 2019, 2.26pm.
804	24	2	65	BArch B126.1560, Blatt 99.
812	24	2	75	Schweizerisches Auswanderungsamt und Auswanderungsbüro. Überseeische Auswanderungen aus der Schweiz, 1910-1953. Schweizerisches Bundesarchiv, E 2175-2, Band 56.
815	24	2	79	National Archives and Records Administration; Washington, DC; ARC Title: *Index to Petitions for Naturalizations Filed in Federal, State, and Local Courts in New York City, 1792-1906*; NAI Number: *5700802*; Record Group Title: *Records of District Courts of the United States, 1685-2009*; Record Group Number: *RG 21*. Social Security Administration. *Social Security Death Index, Master File*. Social Security Administration. Number: *090-28-0813*; Issue State: *New York*; Issue Date: *1951-1953*.
838	26	1	6	National Archives at San Francisco; San Bruno, California; NAI Number: *605504*; Record Group Title: *RG 21*; Record Group Number: *Records of District Courts of the United States, 1685-2009.*
842	26	1	11	NARA, Publication Number M1933, Safehaven Reports of the War Crimes Branch, 1944-1945, Record Group No. 153; Roll 0003, Folder 24.
865	26 26 42	2 2 D	36 37 17	Der Spiegel, Nr. 8, 17. Februar 1997, „Diamanten für den Reichsmarschall“.
876	26	2	53	North Carolina State Board of Health, Bureau of Vital Statistics. *North Carolina Death Certificates*. Microfilm S.123. Rolls 19-242, 280, 313-682, 1040-1297. North Carolina State Archives, Raleigh, North Carolina.
889	28	1	11	United States of America, Bureau of the Census. *Sixteenth Census of the United States, 1940*. Washington, D.C.: National Archives and Records Administration, 1940. T627, 4,643 rolls. – Year: *1940*; Census Place: *Ventura, Ventura, California*; Roll: *m-t0627-00365*; Page: *63A*; Enumeration District: *56-56.*
890	28	1	13	Memorial des Großherzogtums Luxemburg, Samstag, 24. Juli 1909, No. 40, p. 572.
932	28	2	69	National Archives at Chicago; Chicago, Illinois; ARC Title: *Petitions for Naturalization, 1906 - 1991*; NAI Number: *6756404*; Record Group Title: *Records of District Courts of the United States, 1685-2009*; Record Group Number: *RG 21*.
949	29 29 44	1 1 B	12 13 13	United States of America, Bureau of the Census. *Sixteenth Census of the United States, 1940*. Washington, D.C.: National Archives and Records Administration, 1940. T627, 4,643 rolls. - Year: *1940*; Census Place: *New York, New York, New York*; Roll: *m-t0627-02658*; Page: *11B*; Enumeration District: *31-1461*.
955	29	1	19	National Archives at Chicago; Chicago, Illinois; ARC Title: *Petitions for Naturalization, 1906 - 1991*; NAI Number: *6756404*; Record Group Title: *Records of District Courts of the United States, 1685-2009*; Record Group Number: *RG 21*.
962	29	2	29	https://de.wikipedia.org/wiki/Lohmann-Aff%C3%A4re_(Weimarer_Republik) last accessed on January 20, 2019, 4.21pm. https://www.cia.gov/library/center-for-the-study-of-intelligence/kent-csi/vol4no2/html/v04i2a08p_0001.htm last accessed on January 20, 2019, 4.21pm.
973	30 62 86	2 D D	74 20 32a	Ancestry.com. *Rio de Janeiro, Brazil, Immigration Cards, 1900-1965* [database on-line]. Lehi, UT, USA: Ancestry.com Operations, Inc., 2016.
993	30	2	26	National Archives and Records Administration; Washington, DC; ARC Title: *Index to Petitions for Naturalizations Filed in Federal, State, and Local Courts in New York City, 1792-1906*; NAI Number: *5700802*; Record Group Title: *Records of District Courts of the United States, 1685-2009*; Record Group Number: *RG 21*.
1004	30	2	43	NARA Publication Number M1928. Records of the German External Assets Branch of the U.S. Allied Commission for Austria (USACA) Section, 1945-1950, Record Group 260, Roll 0093.

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1014	30 54	2 C	56 9	*Passenger and Crew Lists of Vessels Arriving at New York, New York, 1897-1957.* Microfilm Publication T715, 8892 rolls. NAI: 300346. Records of the Immigration and Naturalization Service; National Archives at Washington, D.C. - Year: *1930*; Arrival: *New York, New York*; Microfilm Serial: *T715, 1897-1957*; Microfilm Roll: *Roll 4662*; Line: *5*; Page Number: *186.*
1021	30	2	63	http://www.auswandereroldenburg.de/-getperson.php?personID=I5219&tree=Auswanderer last accessed January 20, 2019, 5.43pm.
1024	30 54	2 C	66 11	National Archives at Chicago; Chicago, Illinois; ARC Title: *Petitions for Naturalization, 1906 - 1991*; NAI Number: *6756404*; Record Group Title: *Records of District Courts of the United States, 1685-2009*; Record Group Number: *RG 21.*
1037	30	2	84	National Archives and Records Administration; Washington, DC; ARC Title: *Index to Petitions for Naturalizations Filed in Federal, State, and Local Courts in New York City, 1792-1906*; NAI Number: *5700802*; Record Group Title: *Records of District Courts of the United States, 1685-2009*; Record Group Number: *RG 21*
1049	31 55 89	1 C B	14 5 11	The National Archives and Records Administration; Washington, D.C.; *Petitions for Naturalization from the U.S. District Court for the Southern District of New York, 1897-1944*; NARA Microfilm Publication *M1972*; Roll: *1341*, Record Group 21.
1057	31	1	11	National Archives and Records Administration; Washington, DC; ARC Title: *Index to Petitions for Naturalizations Filed in Federal, State, and Local Courts in New York City, 1792-1906*; NAI Number: *5700802*; Record Group Title: *Records of District Courts of the United States, 1685-2009*; Record Group Number: *RG 21*.
1060	31 37 59 105	1 A B D	15 7 3 1	https://de.wikipedia.org/wiki/Heinrich_Ellermann last accessed on January 21, 2019, 10.28am.
1061	31	1	16	https://de.wikipedia.org/wiki/Fritz_Helmut_Landshoff last accessed on January 21, 2019, 10.31am.
1066	31 36	2 C	5 28	http://www.knoll-int.com/discover-knoll/timeline last accessed on January 21, 2019, 10.33am.
1074	32 44	1 D	2 27	Kamerstuk Tweede Kamer 1949-1950 kamerstuknummer 1609 ondernummer 1, Naturalisatie van Jozsef Burkovszki en 20 anderen. Kamerstuk Tweede Kamer 1949-1950 kamerstuknummer 1694 ondernummer 1, Naturalisatie van Martin Cohen en 21 anderen. Accessible via https://www.statengeneraaldigitaal.nl/ Last accessed on January 21, 2019, 11.13am.
1085	32	1	13	The National Archives at Washington, D.C.; Washington, D.C.; Series Title: *Petitions for Naturalization from the U.S. District Court for the District of New Jersey at Newark, New Jersey, 1924-1945*; Series Number: *M2123*; Record Group Title: *Records of the Immigration and Naturalization Service, 1787-2004*; Record Group Number: *85*; NARA Microfilm Number: *181*.
1087	32 35 69 105	1 A D D	16 12 31 2a	*Passenger and Crew Lists of Vessels Arriving at New York, New York, 1897-1957.* Microfilm Publication T715, 8892 rolls. NAI: 300346. Records of the Immigration and Naturalization Service; National Archives at Washington, D.C. - Year: *1947*; Arrival: *New York, New York*; Microfilm Serial: *T715, 1897-1957*; Microfilm Roll: *Roll 7475*; Line: *2*; Page Number: *2.*
1094	32	1	27	Kennedy Grimsted (2011), p. A1-32.
1101	32 32 63	C C D	5 6 15	NARA, Record Group 260, Records of the German External Assets Branch of the U.S. Allied Commission for Austria (USACA) Section, 1945-1950, Publication Number M1928, Roll 0105-0106.
1139	33 90	B B	2 4a	Königseder (2016), p. 135.

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1148	33 51 85	C A B	9 1 10	https://de.wikipedia.org/wiki/Blendax last accessed on January 21, 2019, 5.10pm. https://werner-mertz.de/Ueber-W-und-M/Historie/Firmenchronik/ last accessed on January 21, 2019, 5.10pm. Der Spiegel, Nr. 33, 10. August 1987, „Hoch gepokert“.
1153	33	C	18	https://de.wikipedia.org/wiki/Bolta_Werke last accessed on January 21, 2019, 5.19pm.
1186	34	A	10	Ancestry.com. *Rio de Janeiro, Brazil, Immigration Cards, 1900-1965* [database on-line]. Lehi, UT, USA: Ancestry.com Operations, Inc., 2016.
1192	34	A	17	The National Archives at Washington, D.C.; Washington, D.C.; *Manifests of Alien Arrivals at Buffalo, Lewiston, Niagara Falls, and Rochester, New York, 1902-1954*; Record Group Title: *Records of the Immigration and Naturalization Service, 1787 - 2004*; Record Group Number: *85*; Series Number: *M1480*; Roll Number: *064.*
1221	35	A	4	Wischnath (1986), p. 145.
1224	35	A	8	https://de.wikipedia.org/wiki/Otto_Haas_(Industrieller) last accessed on January 22, 2019, 8.14am.
1228	35	A	14	Bonhage B. (2001). p. 75ff.
1242	35	C	5	https://www.deutsche-digitale-bibliothek.de/item/5JPSYUW5TQUTHQIYRHDWUJQQCGXXANGU last accessed on January 22, 2019, 8.25am.
1262	35 51 54	C D B	27 9 8	NARA. Records of the External Assets Investigation Section of the Property Division, OMGUS, 1945-1949, Record Group 260, Roll M1922_0031.
1266	35	C	32	https://de.wikipedia.org/wiki/Wilhelm_Regendanz last accessed on January 22, 2019, 9.16am.
1272	35	D	5	http://discovery.nationalarchives.gov.uk/details/r/C11825068 last accessed on January 22, 2019, 9.18am.
1294	36	A	13	Ancestry.com. *Pennsylvania, Veteran Compensation Application Files, WWII, 1950-1966* [database on-line]. Provo, UT, USA: Ancestry.com Operations, Inc., 2015.
1315	36	C	26	https://de.wikipedia.org/wiki/Willy_Dreyfus last accessed on January 22, 2019, 10.03am. https://de.wikipedia.org/wiki/J._Dreyfus_%26_Co. last accessed on January 22, 2019, 10.04am.
1327	36	C	42	Ancestry.com. *Hamburg, Germany, Births, 1874-1901* [database on-line]. Provo, UT, USA: Ancestry.com Operations, Inc., 2015. The National Archives at Washington, D.C.; Washington, D.C.; Series Title: *Passenger and Crew Lists of Vessels and Airplanes Departing from New York, New York, 07/01/1948-12/31/1956*; NAI Number: *3335533*; Record Group Title: *Records of the Immigration and Naturalization Service, 1787-2004*; Record Group Number: *85*; Series Number: *A4169*; NARA Roll Number: *72.*
1337	36	D	7	NARA, Records Concerning the Central Collecting Points ("Ardelia Hall Collection"): Wiesbaden Central Collecting Point, 1945-1952, Record Group 260, Roll M1947_0080.
1350	36	D	22	The National Archives at Washington, D.C.; Washington, D.C.; ARC Title: *Naturalization Petition and Record Books for the U.S. District Court for the Northern District of Ohio, Eastern Division, Cleveland, 1907–1946*; NAI: *M1995*; Record Group Title: *Records of District Courts of the United States*; Record Group Number: *21*.
1354	36 65	D B	30a 12a	http://www.pleissenlaendische-familienforschung.de/archiv/d/die_wollschmidts_von_kotteritz.htm last accessed on January 30, 2019, 1.45pm.
1368	37 66	B B	7 5	https://de.wikipedia.org/wiki/Mathilde_Vollmoeller-Purrmann last accessed on January 22, 2019, 10.34am. https://www.leo-bw.de/web/guest/detail/-/Detail/details/PERSON/kgl_biographien/119157314/Vollm%C3%B6ller-Purrmann+Mathilde last accessed on January 22, 2019, 10.45am.

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1372	37 37	C C	1 2	National Archives at College Park; College Park, Maryland, U.S.A.; NAI Number: *613857*; Record Group Title: *General Records of the Department of State*; Record Group Number: *Record Group 59*; Series Number: *Publication A1 5166*; Box Number: *42*; Box Description: *1967 FA – GZ.*
1375	37	C	7	http://www.record.com.pe/es/empresa.html#tab_historia last accessed on January 22, 2019, 10.52am.
1381	37 64	C B	15 17	The National Archives at Washington, D.C.; Washington, D.C.; Series Title: *Passenger and Crew Lists of Vessels and Airplanes Departing from New York, New York, 07/01/1948-12/31/1956*; NAI Number: *3335533*; Record Group Title: *Records of the Immigration and Naturalization Service, 1787-2004*; Record Group Number: *85*; Series Number: *A4169*; NARA Roll Number: *296.*
1385	37	D	3	National Archives and Records Administration; Washington, DC; ARC Title: *Index to Petitions for Naturalizations Filed in Federal, State, and Local Courts in New York City, 1792-1906*; NAI Number: *5700802*; Record Group Title: *Records of District Courts of the United States, 1685-2009*; Record Group Number: *RG 21*.
1391	37	D	14	The National Archives at Washington, D.C.; Washington, D.C.; Series Title: *Passenger and Crew Lists of Vessels and Airplanes Departing from New York, New York, 07/01/1948-12/31/1956*; NAI Number: *3335533*; Record Group Title: *Records of the Immigration and Naturalization Service, 1787-2004*; Record Group Number: *85*; Series Number: *A4169*; NARA Roll Number: *86.*
1428	38	C	17	The National Archives at Washington, D.C.; Washington, D.C.; Series Title: *Petitions for Naturalization from the U.S. District Court for the District of New Jersey at Newark, New Jersey, 1924-1945*; Series Number: *M2123*; Record Group Title: *Records of the Immigration and Naturalization Service, 1787-2004*; Record Group Number: *85*; NARA Microfilm Number: *083.*
1449	39 47	A D	5 11	Der Spiegel, Nr. 6, 4. Februar 1953, „Die kleinen Faruks“.
1462	39	B	12	https://de.wikipedia.org/wiki/Rudolf_Max_Littauer last accessed on January 22, 2019, 1.27pm.
1463	39	C	1	The National Archives at Washington, D.C.; Washington, D.C.; Series Title: *Petitions for Naturalization from the U.S. District Court for the District of New Jersey at Newark, New Jersey, 1924-1945*; Series Number: *M2123*; Record Group Title: *Records of the Immigration and Naturalization Service, 1787-2004*; Record Group Number: *85*; NARA Microfilm Number: *105.*
1467	39	C	7	National Archives at Fort Worth; Fort Worth, Texas.; Record Group Title: *Records of District Courts of the United States*; Record Group Number: *21*.
1470	39	C	12	United States of America, Bureau of the Census. *Sixteenth Census of the United States, 1940*. Washington, D.C.: National Archives and Records Administration, 1940. T627, 4,643 rolls. - Year: *1940*; Census Place: *West Benson, Douglas, Nebraska*; Roll: *m-t0627-02245*; Page: *30B*; Enumeration District: *28-1*.
1480	39 82	D D	5 30	Ancestry.com. *Rio de Janeiro, Brazil, Immigration Cards, 1900-1965* [database on-line]. Lehi, UT, USA: Ancestry.com Operations, Inc., 2016.
1484	39	D	9	*Passenger and Crew Lists of Vessels Arriving at New York, New York, 1897-1957*. Microfilm Publication T715, 8892 rolls. NAI: 300346. Records of the Immigration and Naturalization Service; National Archives at Washington, D.C. - Year: *1908*; Arrival: *New York, New York*; Microfilm Serial: *T715, 1897-1957*; Microfilm Roll: *Roll 1104*; Line: *5*; Page Number: *83.*
1495	40	A	8	The National Archives at Washington, D.C.; Washington, D.C.; Series Title: *Passenger and Crew Lists of Vessels and Airplanes Departing from New York, New York, 07/01/1948-12/31/1956*; NAI Number: *3335533*; Record Group Title: *Records of the Immigration and Naturalization Service, 1787-2004*; Record Group Number: *85*; Series Number: *A4169*; NARA Roll Number: *198.*
1497	40	A	10	United States of America, Bureau of the Census. *Sixteenth Census of the United States, 1940*. Washington, D.C.: National Archives and Records Administration, 1940. T627, 4,643 rolls. - Year: *1940*; Census Place: *Cincinnati, Hamilton, Ohio*; Roll: *m-t0627-03196*; Page: *14B*; Enumeration District: *91-259.*

Inv.-ID	M	L	C	Identification of emigrant status
1499	40	A	12	The National Archives at St. Louis; St. Louis, Missouri; Record Group Title: *Records of the Selective Service System, 1926-1975*; Record Group Number: *147*; Box or Roll Number: *41*.
1506	40 115	B D	10 13	https://de.wikipedia.org/wiki/Moritz_Hochschild last accessed on January 22, 2.39pm. Frankfurter Allgemeine Zeitung, Freitag, 11. April 2003, S. 17, „Ein Frankfurter Traditionskonzern“.
1519	40	C	8	Staatsarchiv Hamburg, Bestand: 373-7 I, VIII (Auswanderungsamt I). Mikrofilmrollen K 1701 - K 2008, S 17363 - S 17383, 13116 - 13183.
1521	40 42	C C	11 14	*Passenger and Crew Lists of Vessels Arriving at New York, New York, 1897-1957.* Microfilm Publication T715, 8892 rolls. NAI: 300346. Records of the Immigration and Naturalization Service; National Archives at Washington, D.C. - Year: *1940*; Arrival: *New York, New York*; Microfilm Serial: *T715, 1897-1957*; Microfilm Roll: *Roll 6441*; Line: *1*; Page Number: *2.*
1528	40	C	20	National Archives and Records Administration; Washington, DC; ARC Title: *Index to Petitions for Naturalizations Filed in Federal, State, and Local Courts in New York City, 1792-1906*; NAI Number: *5700802*; Record Group Title: *Records of District Courts of the United States, 1685-2009*; Record Group Number: *RG 21*.
1545	40	D	32	The National Archives at St. Louis; St. Louis, Missouri; Record Group Title: *Records of the Selective Service System, 1926-1975*; Record Group Number: *147.*
1547	41	A	2	National Archives and Records Administration; Washington, DC; ARC Title: *Index to Petitions for Naturalizations Filed in Federal, State, and Local Courts in New York City, 1792-1906*; NAI Number: *5700802*; Record Group Title: *Records of District Courts of the United States, 1685-2009*; Record Group Number: *RG 21*.
1549	41	A	4	The National Archives and Records Administration; Washington D.C.; *Manifests of Aliens Granted Temporary Admission at Laredo, Texas, December 1, 1929 - April 8, 1955*; NAI: *2843448*; Record Group Title: *Records of the Immigration and Naturalization Service, 1787-2004.*; Record Group Number: *85*; Microfilm Roll Number: *17.*
1559	41	B	9	Ruch et al. (2001), p. 316.
1571	41	C	8	Ancestry.com. *Rio de Janeiro, Brazil, Immigration Cards, 1900-1965* [database on-line]. Lehi, UT, USA: Ancestry.com Operations, Inc., 2016. Staatsarchiv Hamburg, Bestand: 373-7 I, VIII (Auswanderungsamt I). Mikrofilmrollen K 1701 - K 2008, S 17363 - S 17383, 13116 - 13183. Microfilm No.: *K_1805.*
1582	41	D	11b	*Passenger and Crew Lists of Vessels Arriving at New York, New York, 1897-1957.* Microfilm Publication T715, 8892 rolls. NAI: 300346. Records of the Immigration and Naturalization Service; National Archives at Washington, D.C. - Year: *1947*; Arrival: *New York, New York*; Microfilm Serial: *T715, 1897-1957*; Microfilm Roll: *Roll 7269*; Line: *1*; Page Number: *107.*
1600	42 73 73 73 73 96 107 107	B B B B B D B B	13 1 2 3 4 4 2 3	The New York Times, Monday, October 5, 1964, “Fritz Seifart, 70, founded a World Hosiery Business”.
1606	42 45	C A	3 1	https://de.wikipedia.org/wiki/K%E4te_Ahlmann last accessed on January 22, 2019, 5.46pm.
1625	42 60	D C	16 12	The London Gazette, September 20, 1946, p. 4757.
1627	42	D	19	National Archives at Riverside; Riverside, California; NAI Number: *618171*; Record Group Title: *21*; Record Group Number: *Records of District Courts of the United States, 1685-2009.*

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1640	43 80	B D	3 29	National Archives at Chicago; Chicago, Illinois; ARC Title: *Petitions for Naturalization, 1906 - 1991*; NAI Number: *6756404*; Record Group Title: *Records of District Courts of the United States, 1685-2009*; Record Group Number: *RG 21*.
1642	43 44	B B	5 10	Ancestry.com. *Rio de Janeiro, Brazil, Immigration Cards, 1900-1965* [database on-line]. Lehi, UT, USA: Ancestry.com Operations, Inc., 2016. Ancestry.com. *UK, Outward Passenger Lists, 1890-1960* [database on-line]. Provo, UT, USA: Ancestry.com Operations, Inc., 2012.
1643	43	B	6	https://en.wikipedia.org/wiki/Erich_Pommer last accessed on January 22, 2019, 6.59pm.
1650	43 56	C D	5 18	Das Ostpreußenblatt, Samstag, 28. Juni 1958, p. 15. Heinrich (1958), p. 124.
1655	43	C	11	https://de.wikipedia.org/wiki/Peter_Sichel last accessed on January 22, 2019, 7.15pm.
1660	43 83 109	D D D	2 32 9	The National Archives at Washington, D.C.; Washington, D.C.; Series Title: *Passenger and Crew Lists of Vessels and Airplanes Departing from New York, New York, 07/01/1948-12/31/1956*; NAI Number: *3335533*; Record Group Title: *Records of the Immigration and Naturalization Service, 1787-2004*; Record Group Number: *85*; Series Number: *A4169*; NARA Roll Number: *20*.
1676	44 99	A D	6 9	National Archives at Boston; Waltham, Massachusetts; ARC Title: *Petitions and Records of Naturalization, 2/1842 - ca. 1991*; NAI Number: *3432872*; Record Group Title: *Records of District Courts of the United States, 1685-2009*; Record Group Number: *RG 21*.
1679	44 46	B A	1 2	Der Spiegel, Nr. 6, 4. Februar 1953, „Die kleinen Faruks“. Wolfert (2015), p. 74.
1684	44	B	14	United States of America, Bureau of the Census. *Sixteenth Census of the United States, 1940*. Washington, D.C.: National Archives and Records Administration, 1940. T627, 4,643 rolls. - Year: *1940*; Census Place: *New York, Queens, New York*; Roll: *m-t0627-02721*; Page: *8B*; Enumeration District: *41-100*.
1687	44	C	4	http://212.227.236.244/passagierlisten/listen.php?ArchivIdent=AIII15-11.10.1928_N&pass=Cronauer&ID=326349&ankunftshafen=New%20York&lang=de last accessed January 22, 2019, 8.42pm. *Passenger and Crew Lists of Vessels Arriving at New York, New York, 1897-1957*. Microfilm Publication T715, 8892 rolls. NAI: 300346. Records of the Immigration and Naturalization Service; National Archives at Washington, D.C. - Year: *1952*; Arrival: *New York, New York*; Microfilm Serial: *T715, 1897-1957*; Microfilm Roll: *Roll 8171*; Line: *6*; Page Number: *79*.
1700	44	D	11	Ancestry.com. *England & Wales, National Probate Calendar (Index of Wills and Administrations), 1858-1966, 1973-1995* [database on-line]. Provo, UT, USA: Ancestry.com Operations, Inc., 2010. https://www.ilkleygazette.co.uk/news/4838523.Evacuee_recalls_glory_/ last accessed on January 22, 2019, 8.56pm. The National Archives; Kew, Surrey, England; *Duplicate Certificates of Naturalisation, Declarations of British Nationality, and Declarations of Alienage*; Class: *HO 334*; Piece: *53*.
1744	45 45	D D	27 28	https://de.wikipedia.org/wiki/Peter_Sichel last accessed on January 22, 2019, 7.15pm.
1748	46 48 104	A B B	3 1 2	Lussy et al. (2001), p. 108.
1753	46	B	4	NARA, Record Group 260, Records of the German External Assets Branch of the U.S. Allied Commission for Austria (USACA) Section, 1945-1950, Publication Number M1928, Roll 0105-0106.
1762	46	C	5	The National Archives at Washington, D.C.; Washington, D.C.; Series Title: *Passenger and Crew Lists of Vessels and Airplanes Departing from New York, New York, 07/01/1948-12/31/1956*; NAI Number: *3335533*; Record Group Title: *Records of the Immigration and Naturalization Service, 1787-2004*; Record Group Number: *85*; Series Number: *A4169*; NARA Roll Number: *160*.

Inv.-ID	M	L	C	Identification of emigrant status
1771	46	C	15	Exprúa & Sanz (2001).
1772	46	C	17	*Passenger and Crew Lists of Vessels Arriving at New York, New York, 1897-1957*. Microfilm Publication T715, 8892 rolls. NAI: 300346. Records of the Immigration and Naturalization Service; National Archives at Washington, D.C. - Year: *1950*; Arrival: *New York, New York*; Microfilm Serial: *T715, 1897-1957*; Microfilm Roll: *Roll 7909*; Line: *12*; Page Number: *3*.
1782	46 53 53 62 85 94 110	C D D D B D D	32 12b 13b 21 24 11 10	NARA, Record Group 260, Records of the German External Assets Branch of the U.S. Allied Commission for Austria (USACA) Section, 1945-1950, Publication Number M1928, Roll 0105-0106.
1788	46 92	C D	41 16	https://www.findagrave.com/memorial/74903785/kurt-ticher last accessed January 23, 2019, 10.47am. The National Archives of the UK; Kew, Surrey, England; *Board of Trade: Commercial and Statistical Department and successors: Inwards Passenger Lists.*; Class: *BT26*; Piece: *1450*.
1789	46	C	43	Ancestry.com. *Rio de Janeiro, Brazil, Immigration Cards, 1900-1965* [database on-line]. Lehi, UT, USA: Ancestry.com Operations, Inc., 2016.
1790	47	A	1	https://www.ancestry.com/family-tree/person/tree/113238398/ person/140114724088/facts?_phsrc=teD3298&_phstart=successSource last accessed January 23, 2019, 10.59am. National Archives and Records Administration (NARA); Washington, D.C.; *Index to Naturalization Petitions of the United States District Court for the Eastern District of New York, 1865-1957*; Microfilm Serial: *M1164*; Microfilm Roll: *110*.
1792	47	A	3	National Archives at College Park; College Park, Maryland, U.S.A.; NAI Number: *613857*; Record Group Title: *General Records of the Department of State*; Record Group Number: *Record Group 59*; Series Number: *Publication A1 5166*; Box Number: *42*; Box Description: *1967 FA – GZ.*
1796	47 47	B B	5 6	NARA, Record Group 260, Records of the German External Assets Branch of the U.S. Allied Commission for Austria (USACA) Section, 1945-1950, Publication Number M1928, Roll 0105-0106.
1797	47	B	7	NARA, Record Group 260, Records of the German External Assets Branch of the U.S. Allied Commission for Austria (USACA) Section, 1945-1950, Publication Number M1928, Roll 0105-0106.
1802	47	B	12	The National Archives at Washington, D.C.; Washington, D.C.; Series Title: *Passenger and Crew Manifests of Airplanes Arriving at Miami, Florida.*; NAI Number: *2788541*; Record Group Title: *Records of the Immigration and Naturalization Service, 1787 - 2004*; Record Group Number: *85*.
1803	47	B	14	https://de.wikipedia.org/wiki/Jean_Mandel last accessed on January 23, 2019, 11.18am.
1814	47	D	6b	The New York Times, Sunday, December 19, 1976, “Otto Brodnitz”.
1826	47 66	D D	25 33	https://de.wikipedia.org/wiki/Waldemar_Pabst last accessed on January 23, 2019, 11.36am. https://www.deutsche-digitale-bibliothek.de/item/EN43ZNKCB7CMOWMCOR645SOWM2ZWNC6M last accessed on January 23, 2019, 11.42am.
1831	47	D	32	National Archives at Chicago; Chicago, Illinois; ARC Title: *Declarations of Intention, 1856 - 1989*; NAI Number: *1137682*; Record Group Title: *Records of District Courts of the United States, 1685-2009*; Record Group Number: *RG 21*. Ancestry.com. *U.S., Social Security Death Index, 1935-2014* [database on-line]. Provo, UT, USA: Ancestry.com Operations Inc, 2014. Number: *374-09-3631*; Issue State: *Michigan*; Issue Date: *Before 1951*.
1842	48	B	4c	https://fr.wikipedia.org/wiki/Gilbert_de_Goldschmidt last accessed on January 23, 2019, 11.50am.

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1855	48 58 67	B B D	27 22 28	https://gw.geneanet.org/cvpolier?lang=en&n=haniel+von+haimhausen&oc=0&p=brigitte last accessed on January 23, 2019, 11.57am. NARA, Record Group 260, Records of the External Assets Investigation Section of the Property Division, OMGUS, 1945-1949. Publication Number M1922, Roll 0061.
1857	48 64	B C	29 3	The National Archives at Washington, D.C.; Washington, D.C.; Series Title: *Passenger and Crew Lists of Vessels and Airplanes Departing from New York, New York, 07/01/1948-12/31/1956*; NAI Number: *3335533*; Record Group Title: *Records of the Immigration and Naturalization Service, 1787-2004*; Record Group Number: *85*; Series Number: *A4169*; NARA Roll Number: *27*.
1865	48	B	42	Ancestry.com. *Rio de Janeiro, Brazil, Immigration Cards, 1900-1965* [database on-line]. Lehi, UT, USA: Ancestry.com Operations, Inc., 2016.
1869	48	C	5	United States of America, Bureau of the Census. *Sixteenth Census of the United States, 1940*. Washington, D.C.: National Archives and Records Administration, 1940. T627, 4,643 rolls. - Year: *1940*; Census Place: *Irvington, Essex, New Jersey*; Roll: *m-t0627-02334*; Page: *1B*; Enumeration District: *7-172*.
1875	48	C	12	Ancestry.com. *Baden, Germany, Lutheran Baptisms, Marriages, and Burials, 1502-1985* [database on-line]. Provo, UT, USA: Ancestry.com Operations, Inc., 2016.
1893	48	D	27	https://de.wikipedia.org/wiki/Bruno_W%FCstenberg last accessed on January 23, 2019, 5.16pm.
1898	48 72	D C	38 6	NARA, Record Group 153, Safehaven Reports of the War Crimes Branch, 1944-1945, Publication Number: M1933, Roll: 0004, Folder: 26.
1899	48	D	41	https://de.wikipedia.org/wiki/Dieckmann_&_Hansen last accessed January 23, 2019, 5.36pm.
1928	82	D	4	The National Archives at St. Louis; St. Louis, Missouri; Record Group Title: *Records of the Selective Service System, 1926-1975*; Record Group Number: *147*.
1931	49	D	7	*Passenger and Crew Lists of Vessels Arriving at New York, New York, 1897-1957*. Microfilm Publication T715, 8892 rolls. NAI: 300346. Records of the Immigration and Naturalization Service; National Archives at Washington, D.C. - Year: *1924*; Arrival: *New York, New York*; Microfilm Serial: *T715, 1897-1957*; Microfilm Roll: *Roll 3588*; Line: *7*; Page Number: *2*.
1935	49	D	14	Mai (2014), p. 72.
1942	49 49	D D	33 34	*Passenger and Crew Lists of Vessels Arriving at New York, New York, 1897-1957*. Microfilm Publication T715, 8892 rolls. NAI: 300346. Records of the Immigration and Naturalization Service; National Archives at Washington, D.C. - Year: *1930*; Arrival: *New York, New York*; Microfilm Serial: *T715, 1897-1957*; Microfilm Roll: *Roll 4747*; Line: *3*; Page Number: *190*.
1947	50	A	5	Staatsarchiv Hamburg, Bestand: 373-7 I, VIII (Auswanderungsamt I). Mikrofilmrollen K 1701 - K 2008, S 17363 - S 17383, 13116 - 13183. Staatsarchiv Hamburg; Hamburg, Deutschland; *Hamburger Passagierlisten*; Microfilm No.: *K_1864*.
1964	50	B	11	The New York Times, Thursday, May 22, 1941, "Bergolte not agent; Does not represent company here in Bolivia, says president". National Archives and Records Administration; Washington, DC; ARC Title: *Index to Petitions for Naturalizations Filed in Federal, State, and Local Courts in New York City, 1792-1906*; NAI Number: *5700802*; Record Group Title: *Records of District Courts of the United States, 1685-2009*; Record Group Number: *RG 21*.
1988	50	C	2	National Archives and Records Administration; Washington, DC; ARC Title: *Index to Petitions for Naturalizations Filed in Federal, State, and Local Courts in New York City, 1792-1906*; NAI Number: *5700802*; Record Group Title: *Records of District Courts of the United States, 1685-2009*; Record Group Number: *RG 21*.
1991	50	C	5	The National Archives at St. Louis; St. Louis, Missouri; *World War II Draft Cards (Fourth Registration) for the State of New York*; Record Group Title: *Records of the Selective Service System, 1926-1975*; Record Group Number: *147*; Box or Roll Number: *323*.
2017	50	D	31	United States of America, Bureau of the Census. *Sixteenth Census of the United States, 1940*. Washington, D.C.: National Archives and Records Administration, 1940. T627, 4,643 rolls. - Year: *1940*; Census Place: *Islip, Suffolk, New York*; Roll: *m-t0627-02787*; Page: *34B*; Enumeration District: *52-128*.

Inv.-ID	M	L	C	Identification of emigrant status
2024	51 85	A B	1 10	https://de.wikipedia.org/wiki/Blendax last accessed on January 21, 2019, 5.10pm. https://werner-mertz.de/Ueber-W-und-M/Historie/Firmenchronik/ last accessed on January 21, 2019, 5.10pm. Der Spiegel, Nr. 33, 10. August 1987, „Hoch gepokert“.
2037	51	C	5	*Passenger and Crew Lists of Vessels Arriving at New York, New York, 1897-1957*. Microfilm Publication T715, 8892 rolls. NAI: 300346. Records of the Immigration and Naturalization Service; National Archives at Washington, D.C. - Year: *1940*; Arrival: *New York, New York*; Microfilm Serial: *T715, 1897-1957*; Microfilm Roll: *Roll 6510*; Line: *13*; Page Number: *53.*
2044	51	D	17	*Passenger and Crew Lists of Vessels Arriving at New York, New York, 1897-1957*. Microfilm Publication T715, 8892 rolls. NAI: 300346. Records of the Immigration and Naturalization Service; National Archives at Washington, D.C. - Year: *1938*; Arrival: *New York, New York*; Microfilm Serial: *T715, 1897-1957*; Microfilm Roll: *Roll 6241*; Line: *18*; Page Number: *27.*
2049	51	D	25	National Archives and Records Administration; Washington, DC; ARC Title: *Index to Petitions for Naturalizations Filed in Federal, State, and Local Courts in New York City, 1792-1906*; NAI Number: *5700802*; Record Group Title: *Records of District Courts of the United States, 1685-2009*; Record Group Number: *RG 21*.
2069	52	C	5	The National Archives at St. Louis; St. Louis, Missouri; *World War II Draft Cards (Fourth Registration) for the State of New Jersey*; Record Group Title: *Records of the Selective Service System, 1926-1975*; Record Group Number: *147*; Series Number: *M1986.*
2071	52	C	7	https://de.wikipedia.org/wiki/Guilleaume_(Unternehmerfamilie) last accessed on January 24, 2019, 10.31am. https://de.wikipedia.org/wiki/Arnold_von_Guilleaume last accessed on January 24, 2019, 10.32 am.
2073	52	C	9	Staatsarchiv Hamburg, Bestand: 373-7 I, VIII (Auswanderungsamt I). Mikrofilmrollen K 1701 - K 2008, S 17363 - S 17383, 13116 - 13183. *Hamburger Passagierlisten*; Microfilm No.: *K_1840.*
2074	52	C	10	National Archives at Boston; Waltham, Massachusetts; ARC Title: *Naturalization Record Books, 12/1893 - 9/1906*; NAI Number: *2838938*; Record Group Title: *Records of District Courts of the United States, 1685-2009*; Record Group Number: *RG 21*.
2103	53	B	11	The National Archives at Kansas City; Kansas City, Missouri; *Naturalization Index for the Western District of Missouri, compiled 1930 - 1950, documenting the period ca. 1848 - ca. 1950*; Record Group Title: *Records of the District Courts of the United States*; Record Group Number: *RG 21*.
2113	53 53 62	D D D	12a 13a 22	NARA, Record Group 260, Records of the German External Assets Branch of the U.S. Allied Commission for Austria (USACA) Section, 1945-1950, Publication Number M1928, Roll 0105-0106.
2122	53	D	27	Ancestry.com. *Rio de Janeiro, Brazil, Immigration Cards, 1900-1965* [database on-line]. Lehi, UT, USA: Ancestry.com Operations, Inc., 2016..
2130	54	A	5	Ancestry.com. *Baden, Germany, Lutheran Baptisms, Marriages, and Burials, 1502-1985* [database on-line]. Provo, UT, USA: Ancestry.com Operations, Inc., 2016. Ancestry.com. *U.S., Social Security Death Index, 1935-2014* [database on-line]. Provo, UT, USA: Ancestry.com Operations Inc, 2014. Number: *129-26-1884*; Issue State: *New York*; Issue Date: *1951*.
2131	54 61	A C	6 7	Wümme-Zeitung, Dienstag, 13. Dezember 2011, “Ein Pfarrwitwenhaus als Kunst-Insel”. Stadt Staufen (2004), Staufen Kulturwoche 2004, p.15.
2148	54	B	21	The National Archives at St. Louis; St. Louis, Missouri; Record Group Title: *Records of the Selective Service System, 1926-1975*; Record Group Number: *147.*
2153	54	C	6	The National Archives at St. Louis; St. Louis, Missouri; *World War II Draft Cards (Fourth Registration), for The State of Illinois*; Record Group Title: *Records of the Selective Service System, 1926-1975*; Record Group Number: *147*; Series Number: *M2097*.

Inv.-ID	M	L	C	Identification of emigrant status
2154	54	C	8	*Passenger and Crew Lists of Vessels Arriving at New York, New York, 1897-1957*. Microfilm Publication T715, 8892 rolls. NAI: 300346. Records of the Immigration and Naturalization Service; National Archives at Washington, D.C. - Year: *1947*; Arrival: *New York, New York*; Microfilm Serial: *T715, 1897-1957*; Microfilm Roll: *Roll 7282*; Line: *1*; Page Number: *328.*
2171	54	D	22	The National Archives at Washington, D.C.; Washington, D.C.; Series Title: *Passenger and Crew Lists of Vessels and Airplanes Departing from New York, New York, 07/01/1948-12/31/1956*; NAI Number: *3335533*; Record Group Title: *Records of the Immigration and Naturalization Service, 1787-2004*; Record Group Number: *85*; Series Number: *A4169*; NARA Roll Number: *159*.
2181	55	A	4	https://de.wikipedia.org/wiki/Claire_Dux last accessed on January 24, 2019, 11.21am.
2186	55 62 65 65 82 100	B D D D B D	2 39 7 8 2 5	https://www.swiss-archives.ch/detail.aspx?id=2377163 last accessed on January 24, 2019, 11.24am. https://www.wp.de/staedte/siegerland/siegenerin-betreibt-campingplatz-am-lago-maggiore-id11869872.html last accessed on January 24, 2019, 11.25am.
2212	55	D	21	Ancestry.com. *Rio de Janeiro, Brazil, Immigration Cards, 1900-1965* [database on-line]. Lehi, UT, USA: Ancestry.com Operations, Inc., 2016.
2213	55	D	24	https://de.wikipedia.org/wiki/Brillux last accessed on January 24, 2019, 11.50am. https://www.brillux.de/unternehmen/ueber-uns/#historie last accessed on January 24, 2019, 11.51am.
2226	56	C	3	National Archives at Chicago; Chicago, Illinois; ARC Title: *Declarations of Intention, 1856 - 1989*; NAI Number: *1137682*; Record Group Title: *Records of District Courts of the United States, 1685-2009*; Record Group Number: *RG 21.*
2240	56	D	15	Ancestry.com. *Rio de Janeiro, Brazil, Immigration Cards, 1900-1965* [database on-line]. Lehi, UT, USA: Ancestry.com Operations, Inc., 2016.
2245	56	D	23	United States of America, Bureau of the Census. *Fifteenth Census of the United States, 1930*. Washington, D.C.: National Archives and Records Administration, 1930. T626, 2,667 rolls. - Year: *1930*; Census Place: *Scarsdale, Westchester, New York*; Page: *5B*; Enumeration District: *0402*; FHL microfilm: *2341399.*
2252	57	B	14	The National Archives at St. Louis; St. Louis, Missouri; *World War II Draft Cards (Fourth Registration), for The State of Illinois*; Record Group Title: *Records of the Selective Service System, 1926-1975*; Record Group Number: *147*; Series Number: *M2097.*
2256	57	D	3	ABC de Madrid, Tuesday, August 13, 1935, p. 62, “Proclama”.
2271	57	D	22	United States of America, Bureau of the Census. *Fifteenth Census of the United States, 1930*. Washington, D.C.: National Archives and Records Administration, 1930. T626, 2,667 rolls. - Year: *1930*; Census Place: *Queens, Queens, New York*; Page: *1A*; Enumeration District: *0252*; FHL microfilm: *2341328.*
2291	58	B	19	National Archives and Records Administration; Washington, DC; ARC Title: *Index to Petitions for Naturalizations Filed in Federal, State, and Local Courts in New York City, 1792-1906*; NAI Number: *5700802*; Record Group Title: *Records of District Courts of the United States, 1685-2009*; Record Group Number: *RG 21*. Social Security Administration. *Social Security Death Index, Master File*. Social Security Administration. Number: *568-20-9950*; Issue State: *California*; Issue Date: *Before 1951*.
2316	58	D	25	*Marine Crew Chronik*. Year: *1912*, Microfilm, 31 rolls, MIM620/CREW P 159. Marineschule Mürwik, Flensburg, Deutschland.
2328	59	B	14	Ancestry.com. *Cape Town, South Africa, Maitland Cemetery Records, 1888-1959* [database on-line]. Lehi, UT, USA: Ancestry.com Operations, Inc., 2016.
2334	59	C	7	Staatsarchiv Hamburg; Hamburg, Deutschland; *Hamburger Passagierlisten*; Bestand: 373-7 I, VIII (Auswanderungsamt I). Mikrofilmrollen K 1701 - K 2008, S 17363 - S 17383, 13116 – 13183, Microfilm No.: *k_1852*

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2336	59	D	2	NARA, Record Group 260, Records of the German External Assets Branch of the U.S. Allied Commission for Austria (USACA) Section, 1945-1950, Publication Number M1928, Roll 0105-0106.
2343	59 68	D A	20 5b	https://de.wikipedia.org/wiki/Otto_Heinrich_Flottmann last accessed on January 24, 2019, 7.14pm. https://de.wikipedia.org/wiki/Flottmann-Werke last accessed on January 24, 2019, 7.14pm.
2353	60	B	11	Ancestry.com. *Rio de Janeiro, Brazil, Immigration Cards, 1900-1965* [database on-line]. Lehi, UT, USA: Ancestry.com Operations, Inc., 2016.
2359	60	B	17	The National Archives at Washington, D.C.; Washington, D.C.; Series Title: *Passenger and Crew Manifests of Airplanes Arriving at Miami, Florida.*; NAI Number: *2788541*; Record Group Title: *Records of the Immigration and Naturalization Service, 1787 - 2004*; Record Group Number: *85*.
2366	60	C	10b	A. Weibel, Heiman, Eric, in: Historisches Lexikon der Schweiz (HLS), Version vom 03.11.2005, URL: http://www.hls-dhs-dss.ch/textes/d/D45987.php last accessed on January 24, 2019, 7.24pm.
2386	60	D	30	https://de.wikipedia.org/wiki/Max_Kade last accessed on January 24, 2019, 7.32pm. http://maxkadefoundation.org/history.html last accessed on January 24, 2019, 7.32pm.
2390	60	D	34	National Archives and Records Administration; Washington, DC; ARC Title: *Index to Petitions for Naturalizations Filed in Federal, State, and Local Courts in New York City, 1792-1906*; NAI Number: *5700802*; Record Group Title: *Records of District Courts of the United States, 1685-2009*; Record Group Number: *RG 21*.
2396	61	A	1	United States of America, Bureau of the Census. *Sixteenth Census of the United States, 1940*. Washington, D.C.: National Archives and Records Administration, 1940. T627, 4,643 rolls. - Year: *1940*; Census Place: *New Haven, New Haven, Connecticut*; Roll: *m-t0627-00542*; Page: *4A*; Enumeration District: *11-154A*.
2446	62	D	18	JewishGen. *Jewish Holocaust Survivor List from the files of World Jewish Congress, 1918-1982* [database on-line]. Provo, UT, USA: Ancestry.com Operations Inc., 2008.
2451	62	D	27	National Archives at Chicago; Chicago, Illinois; ARC Title: *Illinois, Petitions for Naturalization, 1906-1991*; NAI Number: *593882*; Record Group Title: *Records of District Courts of the United States, 1685-2009*; Record Group Number: *RG 21*.
2454	62 91	D B	32 15	Ancestry.com. *U.S., Social Security Applications and Claims Index, 1936-2007* [database on-line]. Provo, UT, USA: Ancestry.com Operations, Inc., 2015.
2461	63	A	1	National Archives and Records Administration; Washington, D.C.; *Index to Aliens, Not Including Filipinos, East Indians, and Chinese, Arriving by Vessel or at the Land Border at Seattle, Washington*; NAI Number: *2945984*; Record Group Title: *Records of the Immigration and Naturalization Service, 1787-2004*; Record Group Number: *85*; Series Number: *A3691*; Roll Number: *13*.
2462	63	A	2	Ancestry.com. *Rio de Janeiro, Brazil, Immigration Cards, 1900-1965* [database on-line]. Lehi, UT, USA: Ancestry.com Operations, Inc., 2016.
2478	63 63 70	C D D	4 9 12	Regele (2007), “Der deutsche Widerstand und Südtirol”.
2485	63	D	12	*Passenger and Crew Lists of Vessels Arriving at New York, New York, 1897-1957*. Microfilm Publication T715, 8892 rolls. NAI: 300346. Records of the Immigration and Naturalization Service; National Archives at Washington, D.C. - Year: *1946*; Arrival: *New York, New York*; Microfilm Serial: *T715, 1897-1957*; Microfilm Roll: *Roll 7128*; Line: *1*; Page Number: *249*.
2490	64	A	2	https://ka.stadtwiki.net/Julie_Bauer last accessed on January 25, 2019, 10.29am.
2491	64	A	3	National Archives at Chicago; Chicago, Illinois; ARC Title: *Illinois, Petitions for Naturalization, 1906-1991*; NAI Number: *593882*; Record Group Title: *Records of District Courts of the United States, 1685-2009*; Record Group Number: *RG 21*.
2501	64	C	6	National Archives at Chicago; Chicago, Illinois; ARC Title: *Naturalization Orders, 5/23/1927 - 4/5/1994*; NAI Number: *5889455*; Record Group Title: *Records of District Courts of the United States, 1685-2009*; Record Group Number: *RG 21*.

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2533	65	D	4	https://www.mahle.com/de/about-mahle/mahle_chronicle_/ last accessed on January 25, 2019, 10.38am.
2540	65	D	12b	The National Archives and Records Administration; Washington, D.C.; *Petitions for Naturalization from the U.S. District Court for the Southern District of New York, 1897-1944*; Series: *M1972*; Roll: *1199*.
2549	65	D	25	Ancestry.com. *German Phone Directories, 1915-1981* [database on-line]. Provo, UT, USA: Ancestry.com Operations, Inc., 2015.
2568	66	B	18	The National Archives at Washington, D.C.; Washington, D.C.; Series Title: *Passenger Lists of Vessels Arriving at Galveston, Texas, 1896-1951*; Record Group Title: *Records of the Immigration and Naturalization Service, 1787-2004*.
2571	66	C	3	The National Archives and Records Administration; Washington, D.C.; *Petitions for Naturalization from the U.S. District Court for the Southern District of New York, 1897-1944*; Series: *M1972*; Roll: *1033*.
2573	66	C	5	*Passenger and Crew Lists of Vessels Arriving at New York, New York, 1897-1957*. Microfilm Publication T715, 8892 rolls. NAI: 300346. Records of the Immigration and Naturalization Service; National Archives at Washington, D.C. - Year: *1911*; Arrival: *New York, New York*; Microfilm Serial: *T715, 1897-1957*; Microfilm Roll: *Roll 1638*; Line: *13*; Page Number: *14*.
2596	66	D	20	http://www.stolpersteine-hamburg.de/index.php?&MAIN_ID=7&r_name=Heudenfeld&r_strasse=&r_bezirk=&r_stteil=&r_sort=Nachname_AUF&recherche=recherche&submitter=suchen&BIO_ID=732 last accessed on January 25, 2019, 3.50pm.
2597	66	D	23	https://de.wikipedia.org/wiki/Otto_Uebele last accessed on January 25, 2019, 3.52pm.
2613	67	A	3	https://de.wikipedia.org/wiki/Lucy_Borchard last accessed on January 25, 2019, 3.55pm. https://de.wikipedia.org/wiki/Fairplay_Reederei last accessed on January 25, 2019, 3.55pm.
2627	67	C	9	National Archives at Chicago; Chicago, Illinois; ARC Title: *Petitions for Naturalization, 1906 - 1991*; NAI Number: *6756404*; Record Group Title: *Records of District Courts of the United States, 1685-2009*; Record Group Number: *RG 21*.
2655	67	D	25	United States of America, Bureau of the Census. *Fifteenth Census of the United States, 1930*. Washington, D.C.: National Archives and Records Administration, 1930. T626, 2,667 rolls. - Year: *1930*; Census Place: *San Diego, San Diego, California*; Page: *1A*; Enumeration District: *0065*; FHL microfilm: *2339926*.
2659	68 92	A Dev.	5a 101a	https://de.wikipedia.org/wiki/Vera_von_Langen last accessed on January 25, 2019, 4.28pm. United States of America, Bureau of the Census. *Sixteenth Census of the United States, 1940*. Washington, D.C.: National Archives and Records Administration, 1940. T627, 4,643 rolls. - Year: *1940*; Census Place: *Los Angeles, Los Angeles, California*; Roll: *m-t0627-00398*; Page: *25A*; Enumeration District: *60-130*.
2672	68	C	6	The National Archives at St. Louis; St. Louis, Missouri; *World War II Draft Cards (Fourth Registration) for the State of Connecticut*; Record Group Title: *Records of the Selective Service System, 1926-1975*; Record Group Number: *147*; Series Number: *M1962*.
2682	68	D	9	United States of America, Bureau of the Census. *Sixteenth Census of the United States, 1940*. Washington, D.C.: National Archives and Records Administration, 1940. T627, 4,643 rolls. - Year: *1940*; Census Place: *New York, Queens, New York*; Roll: *m-t0627-02738*; Page: *5A*; Enumeration District: *41-997*.
2707	69	A	3	National Archives and Records Administration; Washington, DC; ARC Title: *Index to Petitions for Naturalizations Filed in Federal, State, and Local Courts in New York City, 1792-1906*; NAI Number: *5700802*; Record Group Title: *Records of District Courts of the United States, 1685-2009*; Record Group Number: *RG 21*.
2728	69	C	9	United States of America, Bureau of the Census. *Sixteenth Census of the United States, 1940*. Washington, D.C.: National Archives and Records Administration, 1940. T627, 4,643 rolls. - Year: *1940*; Census Place: *New York, New York, New York*; Roll: *m-t0627-02658*; Page: *7A*; Enumeration District: *31-1442*.

Inv.-ID	M	L	C	Identification of emigrant status
2760	71	A	2	*Passenger and Crew Lists of Vessels Arriving at New York, New York, 1897-1957*. Microfilm Publication T715, 8892 rolls. NAI: 300346. Records of the Immigration and Naturalization Service; National Archives at Washington, D.C. - Year: *1930*; Arrival: *New York, New York*; Microfilm Serial: *T715, 1897-1957*; Microfilm Roll: *Roll 4724*; Line: *2*; Page Number: *166.*
2761	71	A	3	The National Archives at Washington, D.C.; Washington, D.C.; Series Title: *Passenger and Crew Lists of Vessels and Airplanes Departing from New York, New York, 07/01/1948-12/31/1956*; NAI Number: *3335533*; Record Group Title: *Records of the Immigration and Naturalization Service, 1787-2004*; Record Group Number: *85*; Series Number: *A4169*; NARA Roll Number: *154.*
2762	71	A	4	The National Archives at Washington, D.C.; Washington, D.C.; Series Title: *Passenger and Crew Lists of Vessels and Airplanes Departing from New York, New York, 07/01/1948-12/31/1956*; NAI Number: *3335533*; Record Group Title: *Records of the Immigration and Naturalization Service, 1787-2004*; Record Group Number: *85*; Series Number: *A4169*; NARA Roll Number: *41.*
2765	71	B	1	Möller (2003).
2770	71 76 76	B D D	11 3 4	*Passenger and Crew Lists of Vessels Arriving at New York, New York, 1897-1957*. Microfilm Publication T715, 8892 rolls. NAI: 300346. Records of the Immigration and Naturalization Service; National Archives at Washington, D.C. - Year: *1948*; Arrival: *New York, New York*; Microfilm Serial: *T715, 1897-1957*; Microfilm Roll: *Roll 7541*; Line: *17*; Page Number: *276.*
2772	71	B	15	The National Archives at Washington, D.C.; Washington, D.C.; Series Title: *Passenger and Crew Lists of Vessels and Airplanes Departing from New York, New York, 07/01/1948-12/31/1956*; NAI Number: *3335533*; Record Group Title: *Records of the Immigration and Naturalization Service, 1787-2004*; Record Group Number: *85*; Series Number: *A4169*; NARA Roll Number: *108.*
2773	71	B	16	Staatsarchiv Hamburg, Bestand: 373-7 I, VIII (Auswanderungsamt I). Mikrofilmrollen K 1701 - K 2008, S 17363 - S 17383, 13116 - 13183. *Hamburger Passagierlisten*; Microfilm No.: *K_1857.*
2781	71	D	7	United States, Selective Service System. World War I Selective Service System Draft Registration Cards, 1917-1918. Washington D.C.: National Archives and Records Administration. M1509, 4582 rolls. Imaged from Family History Library microfilm. Registration State: New York; Registration County: New York; Roll: 1766390; Draft Board: 136.
2783	71	D	12	National Archives and Records Administration; Washington, DC; ARC Title: *Index to Petitions for Naturalizations Filed in Federal, State, and Local Courts in New York City, 1792-1906*; NAI Number: *5700802*; Record Group Title: *Records of District Courts of the United States, 1685-2009*; Record Group Number: *RG 21*.
2784	71	D	14	NARA, Records of the External Assets Investigation Section of the Property Division, OMGUS, 1945-1949, Record Group Number 260, Publication Number M1922, Roll 0052.
2785	71	D	15	National Archives and Records Administration (NARA); Washington, D.C.; *Index to Naturalization Petitions and Records of the U.S. District Court, 1906-1966, and the U.S. Circuit Court, 1906-1911, for the District of Massachusetts*; Microfilm Serial: *M1545*; Microfilm Roll: *72.*
2801	72	C	2	https://www.welt.de/incoming/article140431631/Der-geheime-Reichtum-des-Reichs.html; last accessed on January 25, 2019, 5.55pm.
2804	72	C	5	*Passenger and Crew Lists of Vessels Arriving at New York, New York, 1897-1957*. Microfilm Publication T715, 8892 rolls. NAI: 300346. Records of the Immigration and Naturalization Service; National Archives at Washington, D.C. - Year: *1929*; Arrival: *New York, New York*; Microfilm Serial: *T715, 1897-1957*; Microfilm Roll: *Roll 4615*; Line: *1*; Page Number: *33.*
2809	72	D	2	The National Archives at St. Louis; St. Louis, Missouri; *World War II Draft Cards (Fourth Registration) for the State of New York*; Record Group Title: *Records of the Selective Service System, 1926-1975*; Record Group Number: *147*; Box or Roll Number: *430.*
2826	72	D	30	https://de.wikipedia.org/wiki/Franz_D._Lucas last accessed on January 26, 2019, 3.56pm.
2829	72 76	D D	35 29	https://en.wikipedia.org/wiki/Ernst_Heinrich_Roth last accessed on January 26, 2019, 3.58pm.

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2847	73	B	7	NARA, Safehaven Reports of the War Crimes Branch, 1944-1945, Record Group 153, Publication Number M1933, Roll Number 0006, Folder 46.
2848	73	B	8	United States of America, Bureau of the Census. *Sixteenth Census of the United States, 1940*. Washington, D.C.: National Archives and Records Administration, 1940. T627, 4,643 rolls. - Year: *1940*; Census Place: *Amherst, Erie, New York*; Roll: *m-t0627-02526*; Page: *1A*; Enumeration District: *15-16.*
2855	73	B	21	United States of America, Bureau of the Census. *Fifteenth Census of the United States, 1930*. Washington, D.C.: National Archives and Records Administration, 1930. T626, 2,667 rolls. - Year: *1930*; Census Place: *Bronxville, Westchester, New York*; Page: *4B*; Enumeration District: *0119*; FHL microfilm: *2341393.*
2861	73	C	6	United States, Selective Service System. World War I Selective Service System Draft Registration Cards, 1917-1918. Washington D.C.: National Archives and Records Administration. M1509, 4582 rolls. Imaged from Family History Library microfilm. Registration State: Pennsylvania; Registration County: Philadelphia; Roll: 1907616; Draft Board: 13.
2880	73	D	25	National Archives at Chicago; Chicago, Illinois; ARC Title: *Illinois, Petitions for Naturalization, 1906-1991*; NAI Number: *593882*; Record Group Title: *Records of District Courts of the United States, 1685-2009*; Record Group Number: *RG 21.*
2882	73	D	27	Iowa Department of Public Health; Des Moines, Iowa; Series Title: *Iowa Marriage Records, 1923–1937*; Record Type: *Microfilm Records.* Record Group 048.
2892	74 112	A D	3 11	*Passenger and Crew Lists of Vessels Arriving at New York, New York, 1897-1957.* Microfilm Publication T715, 8892 rolls. NAI: 300346. Records of the Immigration and Naturalization Service; National Archives at Washington, D.C. - Year: *1930*; Arrival: *New York, New York*; Microfilm Serial: *T715, 1897-1957*; Microfilm Roll: *Roll 4737*; Line: *2*; Page Number: *108.*
2913	74 78	D B	17 10	http://freepages.rootsweb.com/~prohel/genealogy/names/misc/kussy.html last accessed on January 27, 2019, 11.41am. The National Archives at Seattle; Seattle, Washington; ARC Title: *Petitions for Naturalization, 1890 - 1991*; NAI Number: *592779*; Record Group Title: *Records of District Courts of the United States, 1685 - 2009*; Record Group Number: *21*.
2920	74	D	24	Fourteenth Census of the United States, 1920. (NARA microfilm publication T625, 2076 rolls). Records of the Bureau of the Census, Record Group 29. National Archives, Washington, D.C. - Year: *1920*; Census Place: *Brooklyn Assembly District 9, Kings, New York*; Roll: *T625_1158*; Page: *15A*; Enumeration District: *523.*
2936	75	B	11	*Passenger and Crew Lists of Vessels Arriving at New York, New York, 1897-1957.* Microfilm Publication T715, 8892 rolls. NAI: 300346. Records of the Immigration and Naturalization Service; National Archives at Washington, D.C. - Year: *1936*; Arrival: *New York, New York*; Microfilm Serial: *T715, 1897-1957*; Microfilm Roll: *Roll 5808*; Line: *3*; Page Number: *63.*
2942	75	B	16	Ancestry.com. *Rio de Janeiro, Brazil, Immigration Cards, 1900-1965* [database on-line]. Lehi, UT, USA: Ancestry.com Operations, Inc., 2016.
2955	75	D	10	National Archives at San Francisco; San Bruno, California; NAI Number: *605504*; Record Group Title: *RG 21*; Record Group Number: *Records of District Courts of the United States, 1685-2009.*
2962	76	A	1	NARA, Safehaven Reports of the War Crimes Branch, 1944-1945, Publication Number M1933, Record Group Number 153, Roll 0005, Folder 39.
2987	76	D	13	*Passenger and Crew Lists of Vessels Arriving at New York, New York, 1897-1957.* Microfilm Publication T715, 8892 rolls. NAI: 300346. Records of the Immigration and Naturalization Service; National Archives at Washington, D.C. - Year: *1948*; Arrival: *New York, New York*; Microfilm Serial: *T715, 1897-1957*; Microfilm Roll: *Roll 7583*; Line: *25*; Page Number: *273.*
2989	76	D	17	Staatsarchiv Hamburg, Bestand: 373-7 I, VIII (Auswanderungsamt I). Mikrofilmrollen K 1701 - K 2008, S 17363 - S 17383, 13116 - 13183. - *Hamburger Passagierlisten*; Microfilm No.: *K_1869.*
3013	77	C	8	*Passenger and Crew Lists of Vessels Arriving at New York, New York, 1897-1957.* Microfilm Publication T715, 8892 rolls. NAI: 300346. Records of the Immigration and Naturalization Service; National Archives at Washington, D.C. - Year: *1930*; Arrival: *New York, New York*; Microfilm Serial: *T715, 1897-1957*; Microfilm Roll: *Roll 4748*; Line: *3*; Page Number: *150.*

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3030	77	D	31	*Passenger and Crew Lists of Vessels Arriving at New York, New York, 1897-1957.* Microfilm Publication T715, 8892 rolls. NAI: 300346. Records of the Immigration and Naturalization Service; National Archives at Washington, D.C. - Year: *1929*; Arrival: *New York, New York*; Microfilm Serial: *T715, 1897-1957*; Microfilm Roll: *Roll 4492*; Line: *3*; Page Number: *231*.
3032	77	D	33	*Passenger and Crew Lists of Vessels Arriving at New York, New York, 1897-1957.* Microfilm Publication T715, 8892 rolls. NAI: 300346. Records of the Immigration and Naturalization Service; National Archives at Washington, D.C. - Year: *1930*; Arrival: *New York, New York*; Microfilm Serial: *T715, 1897-1957*; Microfilm Roll: *Roll 4755*; Line: *11*; Page Number: *16.*
3036	78	A	2	The National Archives at Atlanta; Morrow, Georgia, USA; Record Group Title: *Records of District Courts of the United States*; Record Group Number: *21; South Carolina Naturalization Records, 1868-1991*.
3040	78	B	4	National Archives at Chicago; Chicago, Illinois; ARC Title: *Petitions for Naturalization, 1906 - 1991*; NAI Number: *6756404*; Record Group Title: *Records of District Courts of the United States, 1685-2009*; Record Group Number: *RG 21*.
3054	78	D	5	National Archives and Records Administration; Washington, DC; ARC Title: *Index to Petitions for Naturalizations Filed in Federal, State, and Local Courts in New York City, 1792-1906*; NAI Number: *5700802*; Record Group Title: *Records of District Courts of the United States, 1685-2009*; Record Group Number: *RG 21*.
3060	78	D	16	*Passenger and Crew Lists of Vessels Arriving at New York, New York, 1897-1957.* Microfilm Publication T715, 8892 rolls. NAI: 300346. Records of the Immigration and Naturalization Service; National Archives at Washington, D.C. - Year: *1935*; Arrival: *New York, New York*; Microfilm Serial: *T715, 1897-1957*; Microfilm Roll: *Roll 5722*; Line: *12*; Page Number: *12.*
3076	79	C	1	The National Archives at Washington, D.C.; Washington D.C.; Series Title: *Passenger Manifests of Airplanes Arriving at San Juan, Puerto Rico*; NAI Number: *2945908*; Record Group Title: *Records of the Immigration and Naturalization Service, 1787-2004*; Record Group Number: *85.*
3077	79	C	4	National Archives; Washington, D.C.; ARC Title: *Naturalization Petitions for the Eastern District of Pennsylvania*, 1795-1930; NAI Number: 158; Record Group Title: M1522.
3090	80	B	1	United States of America, Bureau of the Census. *Sixteenth Census of the United States, 1940*. Washington, D.C.: National Archives and Records Administration, 1940. T627, 4,643 rolls. - Year: *1940*; Census Place: *Beatrice, Gage, Nebraska*; Roll: *m-t0627-02247*; Page: *20A*; Enumeration District: *34-11*.
3105	80	B	13	http://groundwork.megawork.de/le-chol-isch-jesch-schem-4/ last accessed on January 27, 2019, 1.09pm.
3112	80	D	1a	https://de.wikipedia.org/wiki/Togal-Werk last accessed on January 27, 2019, 1.12pm. https://de.wikipedia.org/wiki/G%FCnther_J._Schmidt last accessed on January 27, 2019, 1.12pm.
3113	80	D	1b	https://de.wikipedia.org/wiki/Togal-Werk last accessed on January 27, 2019, 1.12pm. https://de.wikipedia.org/wiki/G%FCnther_J._Schmidt last accessed on January 27, 2019, 1.12pm.
3114	80	D	1c	https://de.wikipedia.org/wiki/G%FCnther_J._Schmidt last accessed on January 27, 2019, 1.12pm.
3123	80	D	11	Fourteenth Census of the United States, 1920. (NARA microfilm publication T625, 2076 rolls). Records of the Bureau of the Census, Record Group 29. National Archives, Washington, D.C. - Year: *1920*; Census Place: *Oakland, Alameda, California*; Roll: *T625_91*; Page: *13A*; Enumeration District: *132.*
3133	80	D	23	*Passenger and Crew Lists of Vessels Arriving at New York, New York, 1897-1957.* Microfilm Publication T715, 8892 rolls. NAI: 300346. Records of the Immigration and Naturalization Service; National Archives at Washington, D.C. - Year: *1932*; Arrival: *New York, New York*; Microfilm Serial: *T715, 1897-1957*; Microfilm Roll: *Roll 5232*; Line: *8*; Page Number: *75.*
3145	80	D	37	De Volkskrant, Monday, December 29, 1997, “Joodse broers redden velen uit handen van nazi’s”.

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3160	81	C	2	The National Archives at Washington, D.C.; Washington, D.C.; Series Title: *Passenger and Crew Lists of Vessels and Airplanes Departing from New York, New York, 07/01/1948-12/31/1956*; NAI Number: *3335533*; Record Group Title: *Records of the Immigration and Naturalization Service, 1787-2004*; Record Group Number: *85*; Series Number: *A4169*; NARA Roll Number: *154*.
3161	81	D	4	Chambre des Représentants, Session 1954-1955 (192/1). Commission des Naturalisations (1), Rapports sur des demandes de naturalisation, p. 59. *www.dekamer.be/digidoc/OCR/K3157/K31571829/K31571829.PDF* last accessed on January 27, 2019, 1.42pm.
3189	82	B	4	www.stolpersteine-bielefeld.de/das-projekt.../Goldmann%20Kurzbiographien_1.pdf last accessed on January 27, 2019, 4.10pm. https://www.gold-mann.de/ueber-uns/ last accessed on January 27, 2019, 4.11pm.
3197	82	B	16	The National Archives at Washington, D.C.; Washington, D.C.; Series Title: *Passenger and Crew Manifests of Airplanes Arriving at Miami, Florida.*; NAI Number: *2788541*; Record Group Title: *Records of the Immigration and Naturalization Service, 1787 - 2004*; Record Group Number: *85*.
3208	82	D	1	National Archives at Boston; Waltham, Massachusetts; ARC Title: *Index to Naturalization Records, 10/22/1844 - 10/28/1955*; NAI Number: *4515406*; Record Group Title: *Records of District Courts of the United States, 1685-2009*; Record Group Number: *RG 21*.
3221	82	D	14	NARA, OSS Washington Secret Intelligence/Special Funds Records, 1942-1946, Record Group Number 226, Publication Number M1934, Roll 0003.
3230	82	D	25	The National Archives at Seattle; Seattle, Washington; Idaho, Oregon, and Washington Petitions for Naturalization, 1932–1991. Records of the District Courts of the United States; Record Group Number: *21*
3239	83	B	14a	National Archives at Chicago; Chicago, Illinois; ARC Title: *Declarations of Intention, 1856 - 1989*; NAI Number: *1137682*; Record Group Title: *Records of District Courts of the United States, 1685-2009*; Record Group Number: *RG 21*.
3240	83	B	14b	United States of America, Bureau of the Census. *Sixteenth Census of the United States, 1940*. Washington, D.C.: National Archives and Records Administration, 1940. T627, 4,643 rolls. - Year: *1940*; Census Place: *Detroit, Wayne, Michigan*; Roll: *m-t0627-01866*; Page: *19A*; Enumeration District: *84-889*.
3249	83	B	26b	https://de.wikipedia.org/wiki/Wolfgang_Reinhardt_(Produzent) last accessed on January 27, 2019, 5.34pm.
3260	83	D	9	National Archives at Chicago; Chicago, Illinois; ARC Title: *Declarations of Intention for Citizenship, 1903 - 1981*; NAI Number: *6756420*; Record Group Title: *Records of District Courts of the United States, 1685-2009*; Record Group Number: *RG 21*.
3279	84	B	11	NARA, OSS Washington Secret Intelligence/Special Funds Records, 1942-1946, Record Group Number 226, Publication Number M1934, Roll 0008.
3289	84	C	9	The National Archives at St. Louis; St. Louis, Missouri; Record Group Title: *Records of the Selective Service System, 1926-1975*; Record Group Number: *147*.
3309	84	D	24a	*Passenger and Crew Lists of Vessels Arriving at New York, New York, 1897-1957*. Microfilm Publication T715, 8892 rolls. NAI: 300346. Records of the Immigration and Naturalization Service; National Archives at Washington, D.C. - Year: *1932*; Arrival: *New York, New York*; Microfilm Serial: *T715, 1897-1957*; Microfilm Roll: *Roll 5165*; Line: *21*; Page Number: *167*.
3322	85	B	10	https://de.wikipedia.org/wiki/Blendax last accessed on January 21, 2019, 5.10pm. https://werner-mertz.de/Ueber-W-und-M/Historie/Firmenchronik/ last accessed on January 21, 2019, 5.10pm. Der Spiegel, Nr. 33, 10. August 1987, „Hoch gepokert“.
3348	85 89	D B	19 17	National Archives at Chicago; Chicago, Illinois; ARC Title: *Petitions for Naturalization, 1906 - 1991*; NAI Number: *6756404*; Record Group Title: *Records of District Courts of the United States, 1685-2009*; Record Group Number: *RG 21*.
3350	85	D	22a	http://familienbuch-euregio.eu/genius/?person=337970 last accessed on January 27, 2019, 6.13pm.
3353	85	D	23	http://familienbuch-euregio.eu/genius/?person=337970 last accessed on January 27, 2019, 6.13pm.

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3368	86	A	1	*Passenger and Crew Lists of Vessels Arriving at New York, New York, 1897-1957*. Microfilm Publication T715, 8892 rolls. NAI: 300346. Records of the Immigration and Naturalization Service; National Archives at Washington, D.C. - Year: *1938*; Arrival: *New York, New York*; Microfilm Serial: *T715, 1897-1957*; Microfilm Roll: *Roll 6227*; Line: *10*; Page Number: *82.*
3370	86 86	B B	4 5	NARA, Records of the External Assets Investigation Section of the Property Division, OMGUS, 1945-1949., Publication Number M1922, Record Group 260, Roll 0077.
3374	86	B	13	*Census Returns of England and Wales, 1911*. Kew, Surrey, England: The National Archives of the UK (TNA), 1911. Class: *RG14*; Piece: *697*.
3377	86 86	C C	4 5	National Archives and Records Administration (NARA); Washington, D.C.; NAI Number: *117*; Record Group Title: *M1524*; Record Group Number: *Naturalization Records of the U.S. District Court for the Southern District of California, Central Division (Los Angeles), 1887-1940.*
3393	86	D	15	*Passenger and Crew Lists of Vessels Arriving at New York, New York, 1897-1957*. Microfilm Publication T715, 8892 rolls. NAI: 300346. Records of the Immigration and Naturalization Service; National Archives at Washington, D.C. - Year: *1925*; Arrival: *New York, New York*; Microfilm Serial: *T715, 1897-1957*; Microfilm Roll: *Roll 3703*; Line: *16*; Page Number: *117.*
3394	86	D	16	Diario de Noticias, Saturday, March 29, 1941, p. 4, "Atos do Presidente da República".
3404	86	D	28	https://de.wikipedia.org/wiki/Carlos_Otto last accessed on January 28, 2019, 9.42am. United States of America, Bureau of the Census. *Sixteenth Census of the United States, 1940*. Washington, D.C.: National Archives and Records Administration, 1940. T627, 4,643 rolls. - Year: *1940*; Census Place: *New York, New York, New York*; Roll: *m-t0627-02675*; Page: *5A*; Enumeration District: *31-2072B.*
3412	87	A	1	National Archives and Records Administration; Washington, DC; ARC Title: *Index to Petitions for Naturalizations Filed in Federal, State, and Local Courts in New York City, 1792-1906*; NAI Number: *5700802*; Record Group Title: *Records of District Courts of the United States, 1685-2009*; Record Group Number: *RG 21*.
3423	87	D	3	The National Archives at Washington, D.C.; Washington, D.C.; NAI Number: *2848504*; Record Group Title: *Records of the Immigration and Naturalization Service, 1787 - 2004*; Record Group Number: *85*; Series Number: *A3998*; NARA Roll Number: *25.*
3427	87	D	10	Ancestry.com. *Rio de Janeiro, Brazil, Immigration Cards, 1900-1965* [database on-line]. Lehi, UT, USA: Ancestry.com Operations, Inc., 2016.
3453	88	D	16	The National Archives at Washington, D.C.; Washington, D.C.; Series Title: *Petitions for Naturalization from the U.S. District Court for the District of New Jersey at Newark, New Jersey, 1924-1945*; Series Number: *M2123*; Record Group Title: *Records of the Immigration and Naturalization Service, 1787-2004*; Record Group Number: *85*; NARA Microfilm Number: *088.*
3465	89	B	12	*Passenger and Crew Lists of Vessels Arriving at New York, New York, 1897-1957*. Microfilm Publication T715, 8892 rolls. NAI: 300346. Records of the Immigration and Naturalization Service; National Archives at Washington, D.C. - Year: *1933*; Arrival: *New York, New York*; Microfilm Serial: *T715, 1897-1957*; Microfilm Roll: *Roll 5294*; Line: *1*; Page Number: *103.*
3476	89	D	5	Ancestry.com. *Rio de Janeiro, Brazil, Immigration Cards, 1900-1965* [database on-line]. Lehi, UT, USA: Ancestry.com Operations, Inc., 2016.
3497	90	B	4b	http://www.aka-verlag.com/index.php?option=com_content&view=article&id=3&Itemid=237&lang=de last accessed on January 28, 2019, 3.43pm. Königseder (2016), p. 135.
3508	90	B	12	https://www.teko.se/aktuellt/nyheter/artiklar/textila-bandtillverkaren-fran-kumla-gar-battre-nagonsin/ last accessed on January 28, 2019, 4.09pm.
3511	90	B	18	Ancestry.com. *Rio de Janeiro, Brazil, Immigration Cards, 1900-1965* [database on-line]. Lehi, UT, USA: Ancestry.com Operations, Inc., 2016.

Inv.-ID	M	L	C	Identification of emigrant status
3526	90	D	8	*Passenger and Crew Lists of Vessels Arriving at New York, New York, 1897-1957*. Microfilm Publication T715, 8892 rolls. NAI: 300346. Records of the Immigration and Naturalization Service; National Archives at Washington, D.C. - Year: *1930*; Arrival: *New York, New York*; Microfilm Serial: *T715, 1897-1957*; Microfilm Roll: *Roll 4874*; Line: *7*; Page Number: *65*.
3533	90	D	22	National Archives and Records Administration; Washington, DC; ARC Title: *Index to Petitions for Naturalizations Filed in Federal, State, and Local Courts in New York City, 1792-1906*; NAI Number: *5700802*; Record Group Title: *Records of District Courts of the United States, 1685-2009*; Record Group Number: *RG 21*.
3549	91	B	8	https://www.eroica-klassikforum.de/forum/index.php?thread/3579-07-stammtafeln-zu-carl-maria-von-weber/ last accessed on January 28, 2019, 4.28pm.
3550	91 120 120 120	B B B B	9 2 3 12	https://de.wikipedia.org/wiki/Vitrulan last accessed on January 28, 2019, 4.30pm.
3555	91	D	4	The National Archives at Washington, D.C.; Washington, D.C.; Series Title: *Passenger and Crew Manifests of Airplanes Arriving at Miami, Florida.*; NAI Number: *2788541*; Record Group Title: *Records of the Immigration and Naturalization Service, 1787 - 2004*; Record Group Number: *85*.
3603	92	B	12a	http://www.rheinische-geschichte.lvr.de/Persoenlichkeiten/familie-zuntz/DE-2086/lido/57c82bf67c60f1.32195538 last accessed on January 28, 2019, 5.02pm.
3604	92	B	12b	http://www.rheinische-geschichte.lvr.de/Persoenlichkeiten/familie-zuntz/DE-2086/lido/57c82bf67c60f1.32195538 last accessed on January 28, 2019, 5.02pm.
3613	92 92	D D	11 12	https://gedbas.genealogy.net/person/show/1086785992 last accessed on January 28, 2019, 6.28pm.
3616	92 100	D Dev.	18 111	http://transcripts.vha.fu-berlin.de/interviews/234?locale=de&page=148 last accessed on January 28, 2019, 6.48pm.
3641	93	B	21	NARA, Records of the External Assets Investigation Section of the Property Division, OMGUS, 1945-1949, Record Group Number 260, Publication Number M1922, Roll 0061.
3656	94	B	4a	The National Archives at Fort Worth; Fort Worth, Texas; Record Group Title: *Records of District Courts of the United States, 1685-2009*; Record Group Number: *21*.
3657	94	B	4b	*Passenger Lists of Vessels Arriving at New York, New York, 1820-1897*. Microfilm Publication M237, 675 rolls. NAI: 6256867. Records of the U.S. Customs Service, Record Group 36. National Archives at Washington, D.C. - Year: *1947*; Arrival: *New York, New York*; Microfilm Serial: *T715, 1897-1957*; Microfilm Roll: *Roll 7448*; Line: *11*; Page Number: *294*.
3658	94	B	5	*Passenger and Crew Lists of Vessels Arriving at New York, New York, 1897-1957*. Microfilm Publication T715, 8892 rolls. NAI: 300346. Records of the Immigration and Naturalization Service; National Archives at Washington, D.C. - Year: *1925*; Arrival: *New York, New York*; Microfilm Serial: *T715, 1897-1957*; Microfilm Roll: *Roll 3769*; Line: *25*; Page Number: *63*.
3665	94	B	13	National Archives at Chicago; Chicago, Illinois; ARC Title: *Illinois, Petitions for Naturalization, 1906-1991*; NAI Number: *593882*; Record Group Title: *Records of District Courts of the United States, 1685-2009*; Record Group Number: *RG 21*.
3688	95	D	4	Staatsarchiv Hamburg, Bestand: 373-7 I, VIII (Auswanderungsamt I). Mikrofilmrollen K 1701 - K 2008, S 17363 - S 17383, 13116 - 13183. - *Hamburger Passagierlisten*; Microfilm No.: *K_1862*.
3691	95 117 117	D B B	8 13 14	https://www.wissner.com/stadtlexikon-augsburg/artikel/stadtlexikon/ferrozell-gmbh/3732 last accessed on January 28, 2019, 7.48pm.

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3694	95	D	13	National Archives and Records Administration; Washington, DC; ARC Title: *Index to Petitions for Naturalizations Filed in Federal, State, and Local Courts in New York City, 1792-1906*; NAI Number: *5700802*; Record Group Title: *Records of District Courts of the United States, 1685-2009*; Record Group Number: *RG 21*.
3714	96	B	2b	https://de.wikipedia.org/wiki/Peter_Reinhold last accessed on January 28, 2019, 7.54pm.
3722	96	B	9	NARA, Safehaven Reports of the War Crimes Branch, 1944-1945, Record Group Number 153, Publication Number M1933, Roll 0007, Folder 48.
3728	96	D	6	The National Archives at Atlanta, Georgia; Atlanta, Georgia; ARC Title: *Petitions for Naturalization, compiled 1880 - 1975*; NAI Number: *2111793*; Record Group Title: *Records of District Courts of the United States*; Record Group Number: *21*.
3742	96	Dev.	101	https://de.wikipedia.org/wiki/Bernhard_Berghaus last accessed on January 28, 2019, 7.59pm.
3752	97	B	5	Pont (2010), p. 14.
3753	97 112	B D	9 9	United States of America, Bureau of the Census. *Fifteenth Census of the United States, 1930*. Washington, D.C.: National Archives and Records Administration, 1930. T626, 2,667 rolls. - Year: *1930*; Census Place: *Arlington, Middlesex, Massachusetts*; Page: *14A*; Enumeration District: *0160*; FHL microfilm: *2340648*.
3755	97	B	12a	https://de.wikipedia.org/wiki/Blum-Haus_(Essen) last accessed on January 29, 2019, 4.24pm.
3756	97	B	12b	https://de.wikipedia.org/wiki/Blum-Haus_(Essen) last accessed on January 29, 2019, 4.24pm.
3757	97	B	12c	https://de.wikipedia.org/wiki/Blum-Haus_(Essen) last accessed on January 29, 2019, 4.24pm.
3760	97	D	2	National Archives at Boston; Waltham, Massachusetts; ARC Title: *Petitions and Records of Naturalization, 2/1842 - ca. 1991*; NAI Number: *3432872*; Record Group Title: *Records of District Courts of the United States, 1685-2009*; Record Group Number: *RG 21*.
3819	99	B	4a	The National Archives at Washington, D.C.; Washington D.C.; Series Title: *Passenger and Crew Manifests of Airplanes Arriving at San Juan, Puerto Rico, 01/01/1942 - 06/30/1948*; NAI Number: *2945867*; Record Group Title: *Records of the Immigration and Naturalization Service, 1787-2004*; Record Group Number: *85*.
3820	99	B	4b	The National Archives at Washington, D.C.; Washington, D.C.; Series Title: *Passenger and Crew Lists of Vessels and Airplanes Departing from New York, New York, 07/01/1948-12/31/1956*; NAI Number: *3335533*; Record Group Title: *Records of the Immigration and Naturalization Service, 1787-2004*; Record Group Number: *85*; Series Number: *A4169*; NARA Roll Number: *361*.
3824	99	B	6b	*Passenger and Crew Lists of Vessels Arriving at New York, New York, 1897-1957*. Microfilm Publication T715, 8892 rolls. NAI: 300346. Records of the Immigration and Naturalization Service; National Archives at Washington, D.C. - Year: *1948*; Arrival: *New York, New York*; Microfilm Serial: *T715, 1897-1957*; Microfilm Roll: *Roll 7544*; Line: *13*; Page Number: *57*.
3832	99	D	8	The National Archives at Atlanta, Georgia; Atlanta, Georgia; ARC Title: *Petitions for Naturalization, compiled 1907 - 1976*; NAI Number: *785956*; Record Group Title: *Records of District Courts of the United States*; Record Group Number: *21*.
3833	99 99	D D	12 13	NARA, Records of the External Assets Investigation Section of the Property Division, OMGUS, 1945-1949, Record Group Number 260, Publication Number M1922, Roll 0003. https://de.wikipedia.org/wiki/Jean_Balthazar last accessed on January 29, 2019, 4.45pm.
3852	100	D	3	http://www.bernergeschlechter.ch/humo-gen/family.php?database=humo_&id=F67719&main_person=I203769 last accessed on January 29, 2019, 4.49pm.
3865	100	Dev.	116	Ancestry.com. *Rio de Janeiro, Brazil, Immigration Cards, 1900-1965* [database on-line]. Lehi, UT, USA: Ancestry.com Operations, Inc., 2016.
3872	101	B	5	The National Archives at Washington, D.C.; Washington, D.C.; Series Title: *Petitions for Naturalization from the U.S. District Court for the District of New Jersey at Newark, New Jersey, 1924-1945*; Series Number: *M2123*; Record Group Title: *Records of the Immigration and Naturalization Service, 1787-2004*; Record Group Number: *85*; NARA Microfilm Number: *111*.

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3888	101	Dev.	103	https://en.wikipedia.org/wiki/Alexander_Zenzes last accessed on January 29, 2019, 4.56pm.
3918	102	Dev.	101	The National Archives at Washington, D.C.; Washington, D.C.; Series Title: *Petitions for Naturalization from the U.S. District Court for the District of New Jersey at Newark, New Jersey, 1924-1945*; Series Number: *M2123*; Record Group Title: *Records of the Immigration and Naturalization Service, 1787-2004*; Record Group Number: *85*; NARA Microfilm Number: *133.*
3919	102	Dev.	102	The National Archives at Washington, D.C.; Washington, D.C.; NAI Number: *2848504*; Record Group Title: *Records of the Immigration and Naturalization Service, 1787 - 2004*; Record Group Number: *85*; Series Number: *A3998*; NARA Roll Number: *129.*
3922	102	Dev.	105	The National Archives of the UK; Kew, Surrey, England; *Board of Trade: Commercial and Statistical Department and successors: Inwards Passenger Lists.*; Class: *BT26*; Piece: *1404*.
3923	102	Dev.	107	http://www.irmaosrayes.com.br/negocios-anos-1970.php last accessed on January 29, 2019, 5.30pm.
3932	103	B	9	National Archives at Riverside; Riverside, California; *Naturalization Records;* NAI Number: *594890*; Record Group Number: *21*; Record Group Title: *Records of District Courts of the United States, 1685-2009.*
3954	103	D	19	http://archiv.sachsen.de/archiv/bestand.jsp?guid=2079c343-14c5-4f5a-abc7-c18f6374e9d5 last accessed on January 29, 2019, 5.40pm.
3956	103	D	21a	http://museum.rutkin.info/node/392 last accessed on January 29, 2019, 5.45pm.
3959	103	Dev.	101	The National Archives at Washington, D.C.; Washington, D.C.; *Manifests of Alien, January 1912-July 1924, and Citizen, January 1912-December 1956, Arrivals at Noyes, Minnesota, and at Dunseith, Neche, Pembina, Saint John, and Walhalla, North Dakota*; NAI: *2839260*; Record Group Title: *Records of the Immigration and Naturalization Service, 1787 - 2004*; Record Group Number: *85*; Series Number: *A3491*; Roll Number: *003.*
3962	103	Dev.	104	NARA, Records of the External Assets Investigation Section of the Property Division, OMGUS, 1945-1949, Publication Number M1922, Record Group Number 260, Roll 0017.
3992	104	Dev.	112	*Passenger and Crew Lists of Vessels Arriving at New York, New York, 1897-1957.* Microfilm Publication T715, 8892 rolls. NAI: 300346. Records of the Immigration and Naturalization Service; National Archives at Washington, D.C. - Year: *1951*; Arrival: *New York, New York*; Microfilm Serial: *T715, 1897-1957*; Microfilm Roll: *Roll 8078*; Line: *9*; Page Number: *20.*
4035	106	Dev.	102	National Archives and Records Administration; Washington, DC; ARC Title: *Index to Petitions for Naturalizations Filed in Federal, State, and Local Courts in New York City, 1792-1906*; NAI Number: *5700802*; Record Group Title: *Records of District Courts of the United States, 1685-2009*; Record Group Number: *RG 21*.
4040	107	B	6a	The National Archives at Washington, D.C.; Washington, D.C.; NAI Number: *2848504*; Record Group Title: *Records of the Immigration and Naturalization Service, 1787 - 2004*; Record Group Number: *85*; Series Number: *A3998*; NARA Roll Number: *273.*
4041	107	B	6b	National Archives at Riverside; Riverside, California; NAI Number: *594890*; Record Group Number: *21*; Record Group Title: *Records of District Courts of the United States, Naturalization Records, 1685-2009.*
4062	107	D	8	Ancestry.com. *Rio de Janeiro, Brazil, Immigration Cards, 1900-1965* [database on-line]. Lehi, UT, USA: Ancestry.com Operations, Inc., 2016.
4067	107	D	15	*Passenger and Crew Lists of Vessels Arriving at New York, New York, 1897-1957.* Microfilm Publication T715, 8892 rolls. NAI: 300346. Records of the Immigration and Naturalization Service; National Archives at Washington, D.C. - Year: *1941*; Arrival: *New York, New York*; Microfilm Serial: *T715, 1897-1957*; Microfilm Roll: *Roll 6529*; Line: *10*; Page Number: *66.*
4077	108	B	9	http://www.feldafing.de/tourismus/oberedorf7.inc.php5 last accessed on January 30, 2019, 9.38am. https://gw.geneanet.org/cvpolier?lang=en&n=von+einsiedel&oc=0&p=adolkar+haubold+siegfried last accessed on January 30, 2019, 9.38am.

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4099	109	D	1	Goldmann (1971), p. 266.
4164	111	D	15	Ancestry.com. *Rio de Janeiro, Brazil, Immigration Cards, 1900-1965* [database on-line]. Lehi, UT, USA: Ancestry.com Operations, Inc., 2016.
4179	111	D	27	https://de.wikipedia.org/wiki/Paul_Distelbarth last accessed on January 30, 2019, 10.18am.
4225	112	B	15	The National Archives at Washington, D.C.; Washington, D.C.; *Passenger Lists of Vessels Arriving at San Francisco, California*; NAI Number: *4498993*; Record Group Title: *Records of the Immigration and Naturalization Service, 1787-2004*; Record Group Number: *85*.
4245	112	D	15	Ancestry.com. *Rio de Janeiro, Brazil, Immigration Cards, 1900-1965* [database on-line]. Lehi, UT, USA: Ancestry.com Operations, Inc., 2016.
4255	113	B	6	The National Archives at Washington, D.C.; Washington, D.C.; Series Title: *Petitions for Naturalization from the U.S. District Court for the District of New Jersey at Newark, New Jersey, 1924-1945*; Series Number: *M2123*; Record Group Title: *Records of the Immigration and Naturalization Service, 1787-2004*; Record Group Number: *85*; NARA Microfilm Number: *133.*
4260	113	B	12	National Archives and Records Administration; Washington, DC; ARC Title: *Index to Petitions for Naturalizations Filed in Federal, State, and Local Courts in New York City, 1792-1906*; NAI Number: *5700802*; Record Group Title: *Records of District Courts of the United States, 1685-2009*; Record Group Number: *RG 21*.
4271	113	D	3	NARA, Safehaven Reports of the War Crimes Branch, 1944-1945, Record Group Number 153, Publication Number M1933, Roll 0004, Folder 28.
4280	113	D	13	NARA, Safehaven Reports of the War Crimes Branch, 1944-1945, Record Group Number 153, Publication Number M1933, Roll 0007, Folder 51.
4300	114	B	10	National Archives and Records Administration; Washington, DC; ARC Title: *Index to Petitions for Naturalizations Filed in Federal, State, and Local Courts in New York City, 1792-1906*; NAI Number: *5700802*; Record Group Title: *Records of District Courts of the United States, 1685-2009*; Record Group Number: *RG 21*.
4353	115	D	23	The National Archives at Washington, D.C.; Washington, D.C.; Series Title: *Petitions for Naturalization from the U.S. District Court for the District of New Jersey at Newark, New Jersey, 1924-1945*; Series Number: *M2123*; Record Group Title: *Records of the Immigration and Naturalization Service, 1787-2004*; Record Group Number: *85*; NARA Microfilm Number: *099.*
4389	116	D	11	http://grabsteine.genealogy.net/tomb.php?cem=3282&tomb=335&b=C last accessed on January 30, 2019, 11.59am.
4399	116	D	23	NARA, Records of the External Assets Investigation Section of the Property Division, OMGUS, 1945-1949, Record Group Number 260, Publication Number M1922, Roll 0013.
4411	117	D	4	Peter W. Landé and Joyce Field, comp. *Poland, Auschwitz Forced Laborers, 1941-1944* [database on-line]. Provo, UT, USA: Ancestry.com Operations Inc, 2008. https://rkd.nl/nl/explore/artists/474720 last accessed on January 30, 2019, 12.07pm.
4426	117	D	21	Staatsarchiv Hamburg, Bestand: 373-7 I, VIII (Auswanderungsamt I). Mikrofilmrollen K 1701 - K 2008, S 17363 - S 17383, 13116 - 13183. - *Hamburger Passagierlisten*; Microfilm No.: *K_1844.*
4429	118	A	6	https://de.wikipedia.org/wiki/Jakob_Michael last accessed on January 30, 2019, 12.11pm.
4457	118	B	9	Uhlig et al. (2001). p. 413ff.
4461	118	B	12b	*Passenger and Crew Lists of Vessels Arriving at New York, New York, 1897-1957.* Microfilm Publication T715, 8892 rolls. NAI: 300346. Records of the Immigration and Naturalization Service; National Archives at Washington, D.C. - Year: *1950*; Arrival: *New York, New York*; Microfilm Serial: *T715, 1897-1957*; Microfilm Roll: *Roll 7899*; Line: *1*; Page Number: *84*.
4467	119	A	6a	http://www.rhein-neckar-industriekultur.de/objekte/drk-rettungswache-und-verwaltung-am-industriehafen-mannheim last accessed on January 30, 2019, 1.00pm. National Archives and Records Administration; Washington, D.C.; *Decimal Files, compiled 1910 - 1949*; Record Group: *59, General Records of the Department of State, 1763 - 2002*; Series ARC ID: *2555709*; Series MLR Number: *A1 3001*; Series Box Number: *410*; File Number: *131*.

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4480	119	B	3b	*Passenger and Crew Lists of Vessels Arriving at New York, New York, 1897-1957*. Microfilm Publication T715, 8892 rolls. NAI: 300346. Records of the Immigration and Naturalization Service; National Archives at Washington, D.C. - Year: *1932*; Arrival: *New York, New York*; Microfilm Serial: *T715, 1897-1957*; Microfilm Roll: *Roll 5240*; Line: *29*; Page Number: *84.*
4599	42	B	6b	*https://www.cia.gov/library/readingroom/docs/IHM%2C%20KARL_0011.pdf* last accessed on January 30, 2019, 1.24pm.
4600	42	B	6c	*https://www.cia.gov/library/readingroom/docs/IHM%2C%20KARL_0011.pdf* last accessed on January 30, 2019, 1.24pm.
4602	36 65	D B	30b 12b	http://www.pleissenlaendische-familienforschung.de/archiv/d/die_wollschmidts_von_kotteritz.htm last accessed on January 30, 2019, 1.45pm.
4603	36 65	D B	30c 12c	The National Archives at Seattle; Seattle, Washington; ARC Title: *Petitions for Naturalization, 1892 - 1991*; NAI Number: *619209*; Record Group Title: *Records of District Courts of the United States, 1685 - 2009*; Record Group Number: *21*.
4609	40	D	9b	*Passenger and Crew Lists of Vessels Arriving at New York, New York, 1897-1957*. Microfilm Publication T715, 8892 rolls. NAI: 300346. Records of the Immigration and Naturalization Service; National Archives at Washington, D.C. - Year: *1939*; Arrival: *New York, New York*; Microfilm Serial: *T715, 1897-1957*; Microfilm Roll: *Roll 6349*; Line: *11*; Page Number: *2*.
4619	58	B	4b	Mittelbayerische Zeitung, Sunday, April 17, 2011, "Hans Rosengold ist tot". https://www.mittelbayerische.de/region/regensburg-stadt-nachrichten/hans-rosengold-ist-tot-21179-art654599.html last accessed on January 30, 2019, 2.24pm.
4620	58	B	4c	Ancestry.com. *Rio de Janeiro, Brazil, Immigration Cards, 1900-1965* [database on-line]. Lehi, UT, USA: Ancestry.com Operations, Inc., 2016.
4622	96	D	5	United States of America, Bureau of the Census. *Fifteenth Census of the United States, 1930*. Washington, D.C.: National Archives and Records Administration, 1930. T626, 2,667 rolls. - Year: *1930*; Census Place: *Cincinnati, Hamilton, Ohio*; Page: *3B*; Enumeration District: *0484*; FHL microfilm: *2341545.*
4639	59	B	4	United States of America, Bureau of the Census. *Fifteenth Census of the United States, 1930*. Washington, D.C.: National Archives and Records Administration, 1930. T626, 2,667 rolls. - Year: *1930*; Census Place: *Chicago, Cook, Illinois*; Page: *4A*; Enumeration District: *0615*; FHL microfilm: *2340177.*

Appendix E – Pre-war investors in the investment commission records

I identify investors that had already been active in Germany during the interwar period (otherwise referred to as "pre-war investors") by combining information given in the records of the investment commission. On the one hand, the records state the relationship between the non-resident investor and the German destination company prior to the particular project under consideration. This information is specified in condensed form in the minutes of the commission meetings, and in more detail under item B.3 of the actual application forms (*B. Beteiligte, 3. Beziehungen zwischen den Beteiligten*). Importantly, the records distinguish the case in which the non-resident investor already owned an equity share in the destination company at the time of the application. On the other hand, the records also provide the year in which the destination company had been established.

Given these two pieces of information, I generally identify those non-resident investors as pre-war investors who already owned an equity share in any one of their destination companies at the time they initially appear in the commission records as investors into that particular destination company, if that particular destination company had existed already before the War. Put differently, applicants who invest in their existing subsidiary in Germany are automatically considered as pre-war investors, as long as they had not established that subsidiary since the lifting of the post-war investment moratorium in June 1950. By implication of both the embargo and the fact that the records contain the universe of FDI after the lifting of the embargo, the investor must therefore have been a pre-war investor, assuming that it was impossible to invest during the War. Information on the age of the destination company serves as a robustness check in that respect. For a non-resident applicant to qualify as a pre-war investor, it is sufficient that any one of her destination companies was under her pre-war (partial) ownership. In particular, that one destination does not have to be her initial post-war destination company. Conversely, pre-war investor status can thus be denied only after having considered the entire investment history of a particular applicant in the commission records.

Evidently, non-resident investors that had been active in Germany already during the interwar period were under no obligation during the early 1950s to invest only into their existing participations. Instead, they could have invested only into other, unrelated German companies, or they could have lost or liquidated their pre-war participations in Germany before June 1950, starting anew thereafter. Such pre-war investors would not be captured by relying exclusively on the above definition.

To address this shortcoming, I take into consideration additional pieces of information that allow inferring pre-war investor status. Table E.1 below lists all pre-war investors identified in this way, and gives the individual reason for doing so. Three main reasons can be distinguished: Firstly, the investor appearing in the commission records is identified by the records as a sister company of the destination company, which implies a common parent outside of Germany, given the expropriation or at least freezing abroad of German external assets during and after the War. By the reasoning given above, the common parent must therefore have been a pre-war investor. Because sister companies did, as a rule, not directly own any equity shares of their German sister, they are not captured by the general identification mechanism for pre-war investors. The implicit assumption behind nevertheless assigning that status is that sister companies did not take independent decisions, but invested only under the direction of the common parent. This assumption is supported by available evidence on the investment activity of multinationals at the time, given in great detail by the multitude of audit reports of regional tax offices charged with the enforcement of exchange controls (*Devisenüberwachung*) which are contained in the commission records[156]. Secondly, the investor appearing in the commission records did not legally hold any ownership share in the destination company at the time of application, but was the effective non-resident owner, while the shares of the destination company were held by domestic trustees. Using senior managers or lawyers as German trustees was a feasible method of achieving the coveted status of a "German" company during the National Socialist regime. Inversely, stating in the investment application after June 1950 that one was merely (re-)acquiring legal rights was used as justification for paying less than the intrinsic value of the shares, as was otherwise stipulated by investment regulations. However, determining the degree of effective control over a company in the absence of legal rights is a non-trivial problem, introducing potential ambiguity into the indicator variable for pre-war investors. Therefore, I only assign that status in case the application papers explicitly identify the non-resident applicant as the effective foreign owner of the destination company. Thirdly, the investor appearing in the commission records is known either to be at present a shareholder in a German company other than the stated destination companies; or to have been a shareholder of a German company during the interwar period, whether that was a post-war destination itself or any other German company. In that case, the investor had liquidated her share in the meantime, but still qualifies as a pre-war investor, given her former activity.

[156] For one extensive example, see BArch B102.6811, 121. Sitzung (16.6.1955), Liste A, Nr. 13, documents following letter of March 12, 1956, by Bundesminister der Finanzen Dr. Laumann to Bank deutscher Länder Dr. Rietz and Bundesminister für Wirtschaft Dr. Berghold.

Considering the various ways of identifying pre-war investors in the commission records, the corresponding indicator variable constructed for estimation purposes represents the lower bound of pre-war investors in the data.

Table E.1 Pre-war investors not identifiable by direct equity share in a destination company.

Inv.-ID	Meeting	List	Case	Reason for identification as pre-war investor
38	4	---	7	Destination company had existed since before the War, investor was sister company, common British parent.
47	4	---	18	Investor had identical firm in Germany before the War.
53	4	---	26	Destination company had existed since before the War, investor was sister company, common Swiss owner.
	35	B	9	
75	5	---	22	Ruch et al. (2001), p. 125.
132	8	---	11	Investor had identical firm in Germany before the War.
	70	B	9	
	70	B	10	
	70	B	11	
141	8	---	23	Investor had already been owner of destination company before the War.
	39	A	9	
	52	D	11	
175	9	---	27	Investor had already been owner of destination company before the War.
	26	2	40	
252	12	---	3	BArch B102.6793, 98. Sitzung (2.7.1954), Liste B, Nr. 14, Prüfungsbericht der Oberfinanzdirektion Stuttgart vom 9.2.1955, p. 4.
	92	D	21	
	98	B	14	
281	13	---	1	Destination company had existed since before the War, German owners had always acted as trustees for Swiss parent company. BArch B102.6743, 14. Sitzung (16.3.1951), Nr. 41, Stellungnahme des AHK.
	14	---	41	
	15	---	34	
	24	1	11	
	40	D	35	
	56	B	11	
	69	D	12	
312	14	---	10	At time of investment, investor was already shareholder in a German company that had existed since before the War. https://www.terrot.de/de/unternehmen/historie.aspx last accessed on February 26, 2019, 11.34am.
	14	---	11	
342	14	---	47	Investor already has subsidiary in Munich at time of initial post-war investment.
	61	D	19	
377	15	---	41	Investor has been the owner of one destination company since before the War, indirectly through Austrian subsidiary. BArch B102.6811, 121. Sitzung (16.6.1955), Liste A, Nr. 13, Prüfungsbericht der Oberfinanzdirektion Hamburg vom 15.11.1955, p. 3.
	17	---	5	
	28	1	6	
	28	1	7	
	69	D	30	
	74	D	29	
	121	A	13	

Inv.-ID	Meeting	List	Case	Reason for identification as pre-war investor
445	17 37 57	--- C D	24 12 11	Destination company had existed since before the War, German owners have acted as trustees for Swedish parent company. Swedish parent owns all patents and special-purpose machines of the destination company.
519	19 32 62 78 88	--- C D B B	19 18 2 2 3	Investor had identical firm in Germany before the War.
521	19	---	22	Investor already held share in destination company before the War.
532	19 23	--- 2	35 52	Destination company had existed since before the War, with German owners but as agent of British investor, AHK: "practically a subsidiary of London firm". BArch B102.6745, 19. Sitzung (8.6.1951), Nr. 35, Stellungnahme des AHK.
602	21 31 46	1 1 C	2 1 1	Investor was indirect pre-war investor through her partial ownership of other US company with German subsidiary, see NARA, RG265 Entry Group Number NC 8-2, Box 490.
652	22 42 42 69 74 84 87 87 87 87 89 93 109 110 110 121	1 A D B B D B D D D D B B B B A	16 4 11 9 6 5 6 4 5 6 15 12 5 1 2 2	Hug (2002), p. 285.
711	23 28 40 44 55 55 64 64 64 81 85	1 2 D D D D B B B D A	29 58 14 14 19 26 10 11 12 14 3	One destination company had existed since before the War, German owners acted as trustees for Swiss parent company. http://www.test.swiss- ships.ch/rheinschiffahrt/rheinreeder/lloyd-ag-basel/lloyd-ag-flottenlisten/lloyd-ag-basel-liste.html last accessed on February 26, 2019, 3.29pm.

Inv.-ID	Meeting	List	Case	Reason for identification as pre-war investor
711	100	D	2	See above
748	23	2	71	Unclear age of destination company, but investor was already managing partner at time of investment.
881	26 28 63 90	2 1 A D	62 29 4 9	Owners of foreign investor had been shareholders in destination company already before the War. BArch B102.6794, 100. Sitzung (30.7.1954), Liste W, Nr. 11, Bericht des AHK, Devisenüberwachung, vom 17.12.1952.
935	28	2	72	Destination company had existed since before the War, investor was sister company, common Belgian owners.
975	30 50	1 B	2 39	Investor had been the owner of a German company since before the War.
1009	30	2	49	Destination company had existed since before the War, investor was sister company, common US owner.
1041	31	1	4	Destination company had existed since before the War, investor was sister company, common Swiss parent.
1055	31 31	1 1	8 9	Investor had identical firm in Germany before the War.
1180	34	A	4	Destination company had existed since before the War, investor was sister company, common Italian parent.
1264	35 40 40 40 45 48 60 63 65 68 74 78 84 84 85 89 92 98 100 100	C B B D B D D D B D D B D D D B B D B B	30 19 20 18 1 22 35 18 1 2 34 1 1 2 39 1 2 23 1 2	Investor was owner of other pre-war investor, appearing, for example, in meeting 11, case No. 2. See also BArch B102.6749, 35. Sitzung (20.12.1951), Liste C, Nr. 30, Stellungnahme des LWM.
1270	35	D	3	Destination company had existed since before the War, investor was sister company, common Swiss shareholders.
1275	35	D	8	Destination company had existed since before the War, investor was sister company, common Dutch-British parent.
1367	37	B	6	Destination company had existed since before the War, investor was sister company, common Italian parent.

Inv.-ID	Meeting	List	Case	Reason for identification as pre-war investor
1393	37	D	16	Destination company had existed since before the War, investor was sister company, common Italian parent.
	85	B	27	
1500	40	B	1	Son of pre-war investor with majority ownership of destination company. BArch B102.6800, 111. Sitzung (14.1.1955), Liste D, Nr. 49, Stellungnahme des LWM.
	107	B	13	
	111	D	49	
1605	42	C	2	Investor had identical firm in Germany before the War.
	63	D	2	
1653	19	---	42	One destination company had existed since before the War, investor was sister company, common British parent.
	36	D	27	
	43	C	9	
	50	D	20	
	82	B	17	
	85	B	21	
1677	44	A	7	Destination company had existed since before the War, investor was sister company, common Swiss parent.
1705	44	D	21	Destination company had existed since before the War, German owners have acted as trustees for Italian parent.
	75	C	3	
1782	46	C	32	One destination company had existed since before the War, investor was sister company in an international holding structure. See also: NARA, Record Group 260, Records of the German External Assets Branch of the U.S. Allied Commission for Austria (USACA) Section, 1945-1950, Publication Number M1928, Roll 0105-0106.
	53	D	12b	
	53	D	13b	
	62	D	21	
	85	B	24	
	94	D	11	
	110	D	10	
1799	47	B	9	Investor had identical firm in Germany before the War.
1866	48	C	1	Investor already held share in destination company before the War.
	55	B	6	
1899	48	D	41	Destination company had existed since before the War, investor was sister company, common US owners.
2066	52	C	1	Investor had identical firm in Germany before the War.
	83	B	13	
2107	53	D	1	Investor was effective parent company without legal ownership share in destination company at time of investment. However, it had initially held a share before the War.
	53	D	3	
2210	55	D	18	Destination company had existed since before the War, German owners act as trustees for French (*Saarland*) parent company.
2238	56	D	13	Investor already held share in destination company before the War.
2251	57	B	13	Destination company had existed since before the War, investor was sister company, common US parent.
2264	57	D	10	Destination company had existed since before the War, investor was sister company, common Dutch parent.
	57	D	12	

Inv.-ID	Meeting	List	Case	Reason for identification as pre-war investor
2274	58 58 111	B B B	1 2 13	Jones (1986), p. 24.
2313	58	D	20	Destination company had existed since before the War, investor was sister company, common Swiss shareholder.
2363	60	C	8	Destination company had existed since before the War, investor was sister company.
2385	60	D	29	Destination company had existed since before the War, investor was sister company, common owners.
2526	65	B	10	Destination company had existed since before the War, investor was sister company, common Dutch parent.
2545	65	D	18	Destination company had existed since before the War, investor was sister company, common British parent.
2615	67	B	2	Destination company had existed since before the War, investor was sister company, common Swedish parent.
2639	67	D	6	Investor had identical firm in Germany before the War.
2646	67	D	16	Investor had no legal ownership share in destination company of the same name that had existed since before the War, but had already granted extensive post-war reconstruction loans that were subsequently converted into equity capital.
2651	67	D	20	Investor had identical firm in Germany before the War.
2839	72	D	51	Destination company had existed since before the War, investor was sister company, common Austrian owners.
3153	81	B	7	Destination company had existed since before the War, investor was sister company, common Austrian owner.
3371	86 86 101	B B D	6 7 2	Destination company had existed since before the War, German owners had always acted as trustees for Swiss parent company.
3458	89	B	4	Destination company has worked exclusively under a licence of the investor since the 1930s. A formal ownership share had been intended since that time but was only realized in 1953. BArch B102.6782, 89. Sitzung (19.2.1954), Liste B, Nr. 4, Stellungnahme des LWM.
3535	90	D	24	Investor had been the owner of a German company before the War., see PA AA R117.263, Band 1, Schreiben Handelsabteilung der Kgl. Britischen Botschaft an Auswärtiges Amt, 14.3.1932.
3579	91	D	42	Destination company had existed since before the War, investor was sister company, common Swiss owner.
3611	92 113	D B	9 1	Destination company had existed since before the War, investor was sister company, common Swiss parent.
3956	103	D	21	Investor had already been owner of destination company before the War.

Inv.-ID	Meeting	List	Case	Reason for identification as pre-war investor
4099	109	D	1	Owners of investor companies had already been owners of destination company before the War.
4201	111	D	47	Destination company had existed since before the War, German owners had always acted as trustees for Swiss parent company.
4232	112	D	3	Destination company had existed since before the War, investor was sister company, common Swiss owners.

Appendix F – Economic Sectors

The distribution of FDI across economic sectors represents one interesting dimension of the investment commission data. In particular, it is a precondition for estimating the influence of sectoral agglomeration on the location choice of non-resident investors across West German districts during the period under consideration. Sectoral agglomeration itself can be measured by using sectoral employment shares derived from the West German occupation census of September 1950, which is conveniently timed to virtually coincide with the beginning of the period covered by the commission data.

The use of the census data is significantly complicated by the fact that the results were published separately for each German *Land*. Eight out of nine *Länder* (excluding West Berlin and later *Saarland*) use exactly the same classification to present district-level results, in the form of the number of people working in a particular economic sector (*Wirtschaftsgruppe*). Thus, the results are already given in the ideal form for calculating sectoral employment shares. For unknown reasons, however, North Rhine-Westphalia chose to publish district-level results only in the form of the number of people working in a particular occupational group (*Berufsgruppe*). Even though economic sectors and occupational groups are related as measured by *Wirtschaftsgruppe* and *Berufsgruppe* respectively, they are distinct from each other in two important dimensions: On the one hand, *Berufsgruppen* are defined more broadly than *Wirtschaftsgruppen*. Thus, the single *Berufsgruppe* "*Nahrungs- und Genußmittelhersteller*" can be attributed to five different *Wirtschaftsgruppen*, which are "*Mühlen- und Bäckereigewerbe"*; „*Fleisch-, Milch-, Zuckerindustrie"*; "*Obstverwertung, Gewürzverarbeitung"*; "*Getränkeherstellung"*; and "*Tabakwarenherstellung"*. On the other hand, occupational groups have an additional dimension according to the status of the employed individual.

Thus, the *Berufsgruppe* "*Nahrungs- und Genußmittelhersteller*" does not include all individuals working in the food, beverages and tobacco industries. There are the additional occupational groups of "*Gewerbliche Hilfsberufe*", "*Ingenieure und Techniker*", "*Technische Sonderfachkräfte*", and "*Maschinisten und zugehörige Berufe*". Some individuals falling in each of these groups likely worked in the food, beverages and tobacco industries.

Being by far the most important *Land* at the time in terms of population and economic turnover, North Rhine-Westphalia cannot simply be excluded from the sample. As a consequence, the much more suitable classification employed by the other *Länder* needs to be abandoned to conform with the important outlier. I do so by creating sixteen comprehensive economic sectors which accommodate the two different classifications as well as possible and which are presented in Table F.1 below. Specifically, I calculate sectoral employment shares per district by summing the total workforce for each sector (*Erwerbspersonen insgesamt*) and dividing by the overall total workforce in the particular district. For all *Länder*, this overall workforce excludes assisting relatives (*mithelfende Familienangehörige*) in agriculture (sector 1), as well as all types of pensioners and recipients of transfer payments (*Selbstständige Berufslose*)[157]. Specifically for North Rhine Westphalia, I also exclude the four additional occupational groups mentioned above from the overall workforce. To nevertheless ensure comparability with districts located in the other eight *Länder*, I thus implicitly assume that these four groups were distributed uniformly across the sixteen sectors. In other words, each industry employed an identical proportion of regular workers to technicians, etc. Across all districts in North-Rhine Westphalia, the share of the four excluded groups in the overall workforce amounted to between 2.5 and 10.3 percent, with an average value of 6.4 percent.

The original district-level results of the 1950 occupation census are published in the following volumes, as referenced in the list of published sources above: Bayerisches Statistisches Landesamt (1953), Hessisches Statistisches Landesamt (1952), Niedersächsisches Amt für Landesplanung und Statistik (1953), Statistisches Landesamt Baden-Württemberg (1954), Statistisches Landesamt Bremen (1953), Statistisches Landesamt der Freien und Hansestadt Hamburg (1953), Statistisches Landesamt Nordrhein-Westfalen (1952), Statistisches Landesamt Rheinland-Pfalz (1952), Statistisches Landesamt Schleswig-Holstein (1953).

[157] For a concise definition of the term *Erwerbspersonen*, see the technical documentation provided by any of the *Land* Statistical Authorities in the respective publications of the census results. For the Bavarian example, see Bayerisches Statistisches Landesamt (1953), p. 5-10.

Table F.1 Matching of *Berufsgruppen* and *Wirtschaftsgruppen*.

Sector	North Rhine-Westphalia		Other *Länder*	
	No.	***Berufsabteilung* (single digit) or *Berufsgruppe* (double digit)**	**No.**	***Wirtschaftsgruppe* (double digit)**
1	1	Berufe des Pflanzenbaus und der Tierwirtschaft	03 04 05 08 09	Landwirtschaft und Tierzucht Forst- und Jagdwirtschaft Gärtnerei See- und Küstenfischerei Binnenfischerei
2	21	Bergmännische Berufe	11 12 13 14 15	Steinkohlenbergbau Braunkohlenbergbau Erzbergbau (auch Aufbereitung) Salzbergbau und Salinen Sonstiger Bergbau
3	22	Steingewinner und –verarbeiter, Keramiker	17	Industrie der Steine und Erden
4	25/ /26	Metallerzeuger und –verarbeiter	21 22 23 24 25 26 28 29 44	Eisenschaffende Industrie NE-Metallerzeugung Stahl- und Waggonbau Maschinen- und Apparatebau Schiffbau Fahrzeugbau Feinmechanik und Optik Metallwarenfertigung Musikinstrumente, Spielwaren, Schmuckwaren
5	27	Elektriker	27	Elektrotechnik
6	28	Chemiewerker	31 32 35	Mineralölindustrie Chemische Grundindustrie Gummi- und Asbestverarbeitung
7	29	Kunststoffverarbeiter	34	Kunststoffverarbeitung
8	23	Glasmacher	36	Feinkeramische und Glasindustrie
9	30/ /31 32 33	Holzverarbeiter und zugehörige Berufe Papierhersteller und –verarbeiter Graphische Berufe	37 38 39	Sägerei und Holzverarbeitung Holzverarbeitung Papiererzeugung, Druckereigewerbe
10	34/ /35 36	Textilhersteller und –verarbeiter Lederhersteller, Leder- und Fellverarbeiter	41 42 43	Ledererzeugung und –verarbeitung Textilgewerbe Bekleidungsgewerbe
11	37	Nahrungs- und Genußmittel-hersteller	45 46 47 48 49	Mühlen- und Bäckereigewerbe Fleisch-, Milch-, Zuckerindustrie Obstverwertung, Gewürzverarb. Getränkeherstellung Tabakwarenherstellung

Sector	North Rhine-Westphalia		Other *Länder*	
	No.	***Berufsabteilung* (single digit) or *Berufsgruppe* (double digit)**	**No.**	***Wirtschaftsgruppe* (double digit)**
12	24	Bauberufe	53	Architektur-, Vermessungsbüros
			54	Hoch- und Tiefbau
			55	Zimmerei und Dachdeckerei
			56	Bau- und Elektroinstallation
			57	Ausbaugewerbe
			59	Bauhilfsgewerbe
13	51	Kaufmännische Berufe	65/ /66	Warenhandel und Verlags-gewerbe
			67	Vermittlung und Werbung (Wirtschaftswerbung und Hilfs-gewerbe des Handels)
			68	Geld-, Bank- und Börsenwesen
			69	Versicherungswesen
			75	Nachrichten- und Schreibbüros
14	53	Gaststättenberufe	71	Grundstücksverwaltung
			72	Gaststättenwesen
			73	Theaterwesen, private Forschung
15	52	Verkehrsberufe	82	Deutsche Bundesbahn
			83	Schienenbahnen
			84	Straßenverkehr
			85	Schiff.- und Wasserstraßenwesen
			86	Luftverkehr
			87	Verkehrsneben- und hilfsgewerbe
16	6	Berufe der Haushalts-, Gesundheits- und Volkspflege	19	Energiewirtschaft
			74	Sportpflege
	7	Berufe des Verwaltungs- und Rechtswesens	76	Photographisches Gewerbe
			77	Friseurgewerbe
	8	Berufe des Geistes- und Kunstlebens	78	Reinigungs- und Bewachungsgew.
			79	Häusliche Dienste
	91	Berufstätige ohne nähere Berufsangabe	81	Deutsche Bundespost
			91	Öffentliche Verwaltung
			92	Besatzungsmächte
			93	Politische und wirtschaftliche Organisationen
			94	Rechts- und Wirtschaftsberatung
			95	Kirchen, weltanschaul. Verein.
			96	Erziehung, Wissenschaft, Kultur
			97	Fürsorge und Wohlfahrtspflege
			98	Sozialversicherung
			99	Gesundheitswesen und Hygiene
				Ohne Angabe

Appendix G – Currency conversion of commission data

In the records of the investment commission, amounts of money are denominated in *Deutschmark*. For estimation purposes, I convert these *Deutschmark* (DM) amounts into Swiss *Francs* (CHF), using quarterly averages of the exchange rates quoted in the evening edition of the Neue Zürcher Zeitung.

- For investment occurring with foreign exchange (*Deviseneinbringung*) or through the importation of some kind of tangible capital (*Sacheinbringung*), I use the official DM-CHF exchange rate for conversion. From the beginning of the period under observation to May 11, 1953, this rate is equal to the clearing parity of 103.90 CHF (bid) and 104.30 CHF (ask) for 100 DM. From May 12, 1953, to the end of the period under observation, the rate fluctuates slightly around the clearing parity, because pegged trading in *Deutschmark* foreign exchange had resumed in Zurich on that day.

Quarterly averages of the official DM-CHF exchange rate, based on the average of bid and ask prices, are therefore given as:

Table G.1 – Quarterly averages of the official DM-CHF exchange rate

Quarter	Average exchange rate	Quarter	Average exchange rate
3rd q 1950	1.041 CHF for 1 DM	1st q 1953	1.041 CHF for 1 DM
4th q 1950	1.041 CHF for 1 DM	2nd q 1953	1.042225 CHF for 1 DM
1st q 1951	1.041 CHF for 1 DM	3rd q 1953	1.041565 CHF for 1 DM
2nd q 1951	1.041 CHF for 1 DM	4th q 1953	1.043653 CHF for 1 DM
3rd q 1951	1.041 CHF for 1 DM	1st q 1954	1.044203 CHF for 1 DM
4th q 1951	1.041 CHF for 1 DM	2nd q 1954	1.041903 CHF for 1 DM
1st q 1952	1.041 CHF for 1 DM	3rd q 1954	1.041506 CHF for 1 DM
2nd q 1952	1.041 CHF for 1 DM	4th q 1954	1.041141 CHF for 1 DM
3rd q 1952	1.041 CHF for 1 DM	1st q 1955	1.041737 CHF for 1 DM
4th q 1952	1.041 CHF for 1 DM		

- For investment occurring with acquired *Sperrmark* or *Libka-Mark*, I use the corresponding exchange rate for conversion. This is the acquired *Sperrmark* rate from June 4, 1951, until September 16, 1954, and the *Libka-Mark* rate from September 17, 1954 until the end of the period under observation. *Sperrmark* quotations for the period prior to June 1951 are extremely rare.

On March 15, 1951, the Frankfurter Allgemeine Zeitung notes that the average rate for 100 DM in *Sperrmark* was 56.60 CHF two days earlier[158]. This is in broadly in line with early average prices for June 1951 as published in the Neue Zürcher Zeitung. (48.50 on June 4, 54.75 on June 30). Due to the absence of any additional information, I use the single quote for March 13 as the average rate for the first quarter of 1951. Quarterly averages of the *Sperrmark*/*Libka-Mark* exchange rate, again based on the average of bid and ask prices, are therefore given as:

Table G.2 – Quarterly averages of the *Sperrmark/Libka-Mark* exchange rate.

Quarter	Average exchange rate	Quarter	Average exchange rate
3rd q 1950	---	1st q 1953	0.6104054 CHF for 1 DM
4th q 1950	---	2nd q 1953	0.6094366 CHF for 1 DM
1st q 1951	0.565 CHF for 1 DM	3rd q 1953	0.6537987 CHF for 1 DM
2nd q 1951	0.5032 CHF for 1 DM	4th q 1953	0.7287666 CHF for 1 DM
3rd q 1951	0.6192308 CHF for 1 DM	1st q 1954	0.8676013 CHF for 1 DM
4th q 1951	0.5872297 CHF for 1 DM	2nd q 1954	0.9827778 CHF for 1 DM
1st q 1952	0.5643421 CHF for 1 DM	3rd q 1954	0.9704747 CHF for 1 DM
2nd q 1952	0.5822535 CHF for 1 DM	4th q 1954	0.9936635 CHF for 1 DM
3rd q 1952	0.6356962 CHF for 1 DM	1st q 1955	0.9957368 CHF for 1 DM
4th q 1952	0.6412666 CHF for 1 DM		

As quarterly averages are already quoted in CHF for 1 DM, I simply multiply the respective *Deutschmark* amount invested with the corresponding quarterly average exchange rate, in order to calculate its CHF equivalent.

[158] Frankfurter Allgemeine Zeitung of Thursday, March 15, 1951, p. 8 „Die Sperrmark in der Schweiz“.

Appendix H – Archival data on corporate pre-war US investors

I retrieve information on corporations from the United States of America having invested in Germany before the Second World War from the US National Archives in College Park/Maryland. The corresponding records can be found in Record Group Number 265, Entry Number NC 8-2, "Foreign Funds Control, TFR-500: Original Reports Series A-II (by Organization), 1943 – 1945".

Overall, the records containing the original TFR-500 reports are divided into three parts: Reports filed by individuals (A-I), by organizations (A-II) and by trustees (A-III). Foreign investment by US corporations is contained in reports by organizations (A-II). The term "organization" is meant broadly: Beyond business corporations, it also includes endowments, trust companies, universities and church organizations, as well as banks. One individual organization is identified by having filed a "Series A-II: Summary Report by Organizations" (red form).

For the purpose of identifying the universe of corporate, pre-war US investors in Germany, I only retain organizations that reported owning a subsidiary in Germany. This definition corresponds to the Classes A1 (Corporations, associations, and similar organizations), A2 (Branches) or A3 (Partnerships) on the "Series B: Detailed Property Report by jurisdiction" (white form), if the German subsidiary was in direct ownership of the US organization. In this case, organizations had to file an additional "Series C: Report of Interests in Primary Allied Organizations" (blue form). If the German subsidiary was in indirect ownership of the US organization, e.g. through its subsidiary in Great Britain, the German subsidiary would not appear on the white form for Germany, but rather on the white form for Great Britain. However, the US organization had to file a "Series C Supplement: Report of Interests in Secondary Allied Organizations" (yellow form) for its German subsidiary. In practice, therefore, I identify corporate, pre-war US investors in Germany as the organizations that filed a blue or yellow form for their ownership of a German company. Organizations had to submit a separate blue or yellow form for each German company they owned.

This definition excludes any other type of German assets, including corporate shares (Class C-11). Ownership of Class C-11 assets is equivalent to mere portfolio investment, as blue or yellow forms had to be filed even in case of "ownership of less than 25 percent of voting securities". Typical C-11 assets are shares of Deutsche Bank, Rudolph Karstadt, or IG Farben. However, this restrictive definition is only applied during the first step of identifying corporate investors.

For estimation purposes, I subsequently include those other assets in total assets owned in Germany by the corporate investors, rather than using only the German assets organized within the particular blue-form or yellow-form subsidiaries.

Appendix H.1 – Excluded cases

The purpose of collecting data on corporate, pre-war US investors is to determine which of these corporations invested in West Germany during the first half of the 1950s. This purpose necessitates excluding a number of corporations from the sample. Firstly, corporations need to have been able to invest during the post-war period in the first place. Therefore, I exclude all corporations which had become defunct or inactive by 1950, as well as all for which it is not verifiable whether they were still active in 1955, the end of my post-war period under consideration. Secondly, corporations should have been US corporations already at the time they made their pre-war investments in Germany. For this reason, I exclude the following cases:

- Organizations designated on the TFR-500 forms as „Alien property". Such organizations were ultimately owned by enemy nationals, i.e. Germans, and were put under sequester by an Alien Property Custodian.

- Corporations belonging to the Stinnes group. The owners of the German industrial conglomerate had transferred their worldwide assets into US holding structures and had managed to avoid sequester as of 1943[159]. Therefore, they do not fall under the "Alien property" designation in the TFR-500 forms.

- Corporations belonging to the Jakob-Michael group or the Petschek group. Jakob Michael was a German merchant who had assembled a conglomerate of German companies during the 1920s. He emigrated to the Netherlands in 1931 and the United States in 1939. He managed to escape "aryanization" of his German assets, notably the "Deutsche Familien-Kaufhaus (DeFaKa)", and was active in Germany during the post-war period[160]. The Petschek family were Czech industrialists who expanded into German industry during the 1920s, notably into soft coal mining. Even though they sold most of their German assets during the 1930s, they had retained residual ownership shares until 1943 (Gall 2006, 65) [161].

[159] They were sequestered later on, cf. Der Spiegel, Nr. 24, June 12, 1957, p. 22 "Die Aktien vom Delaware".

[160] Jaeger, Hans, "Michael, Jakob" in: Neue Deutsche Biographie 17 (1994), S. 425 f. [Online-Version]; URL: https://www.deutsche-biographie.de/pnd138377413.html#ndbcontent, last accessed on Feb. 2, 2019, 4.44pm.

[161] Geršlová, Jana, "Petschek, Julius" in: Neue Deutsche Biographie 20 (2001), S. 268-269 [Online-Version]; URL: https://www.deutsche-biographie.de/pnd139166343.html#ndbcontent, last accessed on Feb. 2, 2019, 4.47pm.

- Miscellaneous cases. The Church of Latter-day Saints owned a church in Selbongen, East Prussia, which did not constitute a business enterprise. The Witroth corporation was a shell company representing Rothschild ownership claims to the Vítkovice Iron Works in Czechoslovakia, which they had been forced to sell to the *Reichswerke Hermann Göring* in 1939 (Ferguson 1998, 1001). The Westhold corporation and the North River Securities Corporation were holding structures for the Czechoslovakian Bata shoemaking corporation[162]. Both the Rothschild and the Bata group historically owned German companies through their Czechoslovakian companies, which therefore did not represent pre-war US investments.

Table H.1.1 – List of excluded US corporations with pre-war subsidiaries in Germany.

US corporation	Reason for exclusion
Atlantic Assets Corporation, c/o Corporation Trust Co., Wilmington	Alien property
Joh. Barth & Sohn, Inc., New York	Alien property
Casco Bay Timber Company, Portland	Alien property
Church of Jesus Christ of Latter-day Saints, Salt Lake City	Church organization
Continental "Borvisk" Company, Wilmington	Unverifiable activity by 1955
Davis & Company, Inc., Houston	Inactive by 1950
The Deimel Linen-Mesh system company, San Francisco	Unverifiable activity by 1955
Eitingon-Schild Co. Inc., New York	Inactive by 1950
G. Hirsch Sons, Inc., New York	Unverifiable activity by 1955
Independent Casing Company, Chicago	Unverifiable activity by 1955
International Mortgage & Investment Corporation, New York	Alien property
Koenig Medicine Company, Chicago	Unverifiable activity by 1955
Kupfer Bros. Co. Inc., New York	Unverifiable activity by 1955
Magdalena Syndicate, New York	Inactive by 1950
New England Industries Inc. (formerly New England Securities Corporation), New York	Jakob Michael holding
New Jersey Industries Inc. (formerly: Phelan Beale Investment and Securities Corporation), New York	Jakob Michael holding
North River Securities Corporation, New York	Czech holding company (Bata)
Northeastern Insurance Company of Hartford, Hartford	Unverifiable activity by 1955
R. Schiffmann Co., Los Angeles	Unverifiable activity by 1955
Hugo Stinnes Corporation, Baltimore	Stinnes holding
Hugo Stinnes Industries, Inc., New York	Stinnes holding

[162] For more information, see http://world.tomasbata.org/america/usa/, last accessed on February 2, 7.19pm.

US corporation	Reason for exclusion
Swiss "Borvisk" Company, Wilmington	Unverifiable activity by 1955
Trubenizing Process Corporation, New York	Unverifiable activity by 1955
United Continental Corporation, New York	Petschek holding
Westhold Corporation, New York	Czech holding company (Bata)
Witroth Corporation, Wilmington	Holding company for claims on Vítkovice Iron Works, Czechoslovakia

Appendix H.2 – Merged cases

Corporations frequently used legally separate, US-based holding companies for their overseas assets, while at the same time retaining a fraction of these assets on their own books. Not accounting for this fact would result in counting the same investor multiple times. It would also not be clear to which of the related US corporations to attribute potential post-war investment activity. Therefore, I merge holding (daughter) companies with their respective parent company. The ultimate parent corporation is identifiable through item Six on the "Series A-II: Summary Reports by Organization" (red form), which reads "Name and address of particular person or persons, if any, having ultimate control of organization […]".

To properly consolidate balance sheets of parent and daughter companies would require detailed financial information to a degree which is not systematically available from the TFR-500 records. Retrieving such information for each individual corporation is beyond the scope of the present project. Therefore, I simply add the value of the assets reported by daughter (holding) companies to their respective parent. Note that this likely results in overestimating total assets for corporations using separate holding companies, which is worse the more of these companies are used.

Table H.2.1 – List of merged parent and daughter corporations among US pre-war investors.

Merged daughter/holding company	Parent company
Aris Gloves Co. Inc., Gloversville	Aris Gloves Inc., Gloversville
Bavarian Oil and Gas Corporation, New York	Socony-Vacuum Oil Company Incorporated, New York.
Bedford Construction Company, New York	Corn Products Refining Company, New York
Charmil Inc., Wilmington	Northeastern Insurance Company of Hartford, Hartford
The Coca-Cola Export Corporation, Wilmington	The Coca-Cola Company, Wilmington
Durex Abrasives Corporation, New York	Durex Corporation, Jersey City

Merged daughter/holding company	Parent company
Electrical Products Investors Corporation, New York	International Telephone and Telegraph Corporation, New York
The Forak Company, New York	Standard Oil Company (New Jersey), New York (64%) Socony-Vacuum Oil Company Incorporated, New York (18%) The Texas Company, New York (13%)
Foreign Investments Inc., New Haven	The Stanley Works, New Britain
Foreign Securities Company, Chicago	Swift and Company (Illinois), Chicago
Richard Hudnut, Inc., New York	William R. Warner & Co. Inc. (Delaware), New York
International Affiliated Corporation, New York	William R. Warner & Co. Inc. (Delaware), New York
International General Electric Company Inc., New York	General Electric Company, Schenectady
International Harvester Export Company, Chicago	International Harvester Company, Chicago
International Securities Company, New York	The Singer Manufacturing Company, New York
International Standard Electric Corporation, New York	International Telephone and Telegraph Corporation, New York
Jadev Corporation, New York	Standard Oil Company (New Jersey), New York
Markt & Company Inc., New York	Markt & Hammacher Company, New York
The Melltone Corporation, Niagara Falls	The Carborundum Company, Niagara Falls
North River Securities Corporation, New York	Westhold Corporation, New York
Otis Elevator Company (Maine), New York	Otis Elevator Company (New Jersey), New York
Pan Foreign Corporation, New York	Standard Oil Company (New Jersey), New York
Pown Corporation, Rochester	Eastman Kodak Company, Rochester
Schoonmaker-Scott Company, Chicago	Butler Brothers, Chicago
Signode International Limited, Chicago	Signode Steel Strapping Company, Chicago
Singer Sewing Machine Company, New York	The Singer Manufacturing Company, New York
Stanco, Inc., New York	Standard Oil Company (New Jersey), New York
Standard Oil Company of New Jersey, New York	Standard Oil Company (New Jersey), New York
Standard Oil Development Company, New York	Standard Oil Company (New Jersey), New York
Sterling Products International Inc., Newark	Sterling Drug Inc., New York
Texaco Development Corporation, Jersey City	The Texas Company, New York

Merged daughter/holding company	Parent company
Tide Water Associated Oil Company, New York	Standard Oil Company (New Jersey), New York
Titan Company Inc., New York	National Lead Company, New York
Union Special Machine Corporation of America, Chicago	Union Special Machine Company, Chicago
United States Lines Operations Inc., New York	United States Lines Company, New York

Appendix I – Data from Deutsches Wirtschaftsinstitut (1951).

The publication of Deutsches Wirtschaftsinstitut (1951) represents an attempt by East German researchers to uncover the "malign influence" of "international financial capital" on West German industry, in order to support the "fight against American plans to draw West Germany into a new World War" (*ibidem*, 7). It does so by compiling a list of West German companies under foreign influence, which the authors intended to be as comprehensive as possible. The list of sources provided on p. 53 includes a variety of business manuals, mostly from the late 1930s, such as the "*Handbuch der deutschen Aktiengesellschaften*", the British "*The Bankers Almanac and Year Book*", or the American "*Moody's Industrials*". Despite the clear political intention behind the publication, its empirical methodology is well documented and attempts to account as precisely as possible for intricate corporate group structures. Thus, it gives the direct equity share of the foreign parent in the German company (*Kapitalbeteiligung des ausländischen Kapitalbesitzers*), as well as its effective equity share through third corporations (*Tatsächlicher Einfluss des ausländischen Kapitalbesitzers*). It also documents the companies for which the precise foreign equity share was not retrievable (represented by a question mark in the respective column), or for which foreign influence is only presumptive, for example, through the existence of a licensing agreement (represented by a hyphen, a dot, or a blank space in the column giving the equity share).

Using the data for estimation purposes requires acknowledging both their ideological background and the real need to account for ramified corporate structures that make it difficult to determine the effective degree of control exercised by corporate headquarters over their subsidiaries. Therefore, I use *Tatsächlicher Einfluss* to measure equity share, but only as benchmark values in compiling variables, instead of the share itself in estimation.

Moreover, the list of non-German sources provided on p. 53 and 54 has a clear Anglo-American focus and likely overestimates the weight of large US and British corporations relative to smaller investors from other countries. In fact, the authors acknowledge their inability to capture the "multitude of small participations" for the case of the Netherlands on p. 45. As a consequence, I use the data as a simple geographical control variable indicating the number of foreign-owned companies in a particular district. In this way, I interpret them only as a lower benchmark of the overall presence of foreign corporations on the local level across Germany, thereby assuming that they at least capture all foreign-owned companies above a certain quantitative threshold. I do not, however, employ them as higher-dimensional control variables by differentiating the data according to countries of origin of the foreign parent company, even though the structure of the data would technically allow for that.

Starting on p. 83, the publication presents a list of companies under foreign influence, according to economic sector and within sectors according to country of origin of the foreign influence. In compiling the variable indicating the number of foreign-owned companies for each West German district, I exclude companies from my sample for the following reasons:

- Companies with an indeterminate foreign ownership share, indicated by a question mark, a hyphen, a dot, or a blank space in the column specifying *Tatsächlicher Einfluss in %*. In this way, I attempt to control for possibly biased sampling by the authors, who had a clear ideological incentive to inflate the number of foreign-owned companies in West Germany.

- Companies located in West Berlin. The records of the post-war Investment Commission do not include investments into West Berlin that would necessitate collecting corresponding data for the local incidence of foreign-owned companies since the pre-war period. Importantly, Deutsches Wirtschaftsinstitut (1951) distinguishes the location of subsidiaries within Germany of the main German subsidiary of the foreign parent company, such as for the case of Unilever on p. 360. Thus, there is a low risk of missing observations across West Germany (excluding Berlin), even though geographical information is in principle based on the legal location of company headquarters.

- Companies which had come under their current ownership at a time during which that owner was still German. This is analogous to the discussion in Appendix H.1. The corresponding foreign owners are as listed in the column *Ausländischer Kapitalbesitzer*:

Hugo Stinnes Industries Inc., New York; For further information, see Appendix H.1.

New Jersey Industries Inc., New York; Jakob-Michael holding, see Appendix H.1.

Thyssen-Bornemisza-Konzern (Rotterdamsch Trustee's Kantoor NV, Rotterdam; Bank voor Handel en Scheepvaart NV, Rotterdam); The Thyssen family was a prominent dynasty in German heavy industry. During the interwar period, they transferred their shares in German companies to shell corporations outside of Germany (Rasch 2010, 63).

The British Metal Corp., London, deren Mutter: Amalgamated Metal Corp. Ltd., London; Schweizerische Gesellschaft für Metallwerte, Basel.; These three companies represent borderline cases. Historically, they had been part of the German *Metallgesellschaft* universe of companies (Ball 2004). The *Schweizerische Gesellschaft für Metallwerte* in fact was a shell company founded by *Metallgesellschaft* in 1910 for tax evasion purposes (Ball 2004, 456). However, their Germanness, so to speak, during the interwar period is opaque and it is therefore not entirely clear whether they ought to be removed from the pertinent sample of foreign investors according to Deutsches Wirtschaftsinstitut (1951). This is a non-negligible problem, as the three foreign companies together are typically reported to own about 25% each of a multitude of German companies engaged principally in the (non-ferrous) metal industry. I remove them nevertheless in order to achieve a conservative measure of the number and geographical distribution of foreign-owned companies.

Theodor Sachs, Santiago de Chile; See Appendix D.2, Table D.2.1, Id-Inv. Number 3691.

- Companies indicated as having been restituted to their original owners; Corresponding to Appendix D.1, I assume the original owners to be ethnic German refugees from National Socialist persecution. In this sense, they were not foreign investors during the pre-war period.

- Companies established between the lifting of the Allied investment embargo in 1950 and the publication of Deutsches Wirtschaftsinstitut (1951); The following companies are identifiable as such through the records of the post-war Investment Commission:

Information in Deutsches Wirtschaftsinstitut (1951)		**Reference in investment commission records**		
German company	**Foreign owner**	**Meeting**	**List**	**Number**
Groninger Farbenfabrik, Bremen	Holländisches Kapital	15	---	42
Voreux-Wolle-Handels GmbH, Frankfurt	Maurice Voreux, Roubaix; Pierre Grisay, Tourcoing.	5	---	9

Appendix J – Districts (*Stadt- und Landkreise*) within West Germany

Using local districts of the Federal Republic of Germany as geographical units for estimation purposes requires making two types of adjustment. Firstly, including district-level, pre-war control variables requires adjusting these pre-war data for changes to district boundaries occurring between the pre-war period and 1950 (Appendix J.2.).

Secondly, the historical distinction among German districts between *Stadtkreise* and *Landkreise* needs to be accounted for (Appendix J.1.). Towns above a certain population size typically formed their own districts, called *Stadtkreis*, independently of the surrounding area. Even though this area thus formed a separate district, its administrative seat, as well as clearly its economic centre was nevertheless identical to the *Stadtkreis*. As a consequence, such *Landkreise* can hardly be interpreted as economically distinct units of observation. This problem is made worse by the fact that the population threshold for towns to be their own *Stadtkreis* varied for historical reasons across West German *Länder*. Thus, Bavaria accounted for approximately 19% of the West German population, but for 34% of its districts, while the smallest Bavarian *Stadtkreis* had 8,802 inhabitants in 1950. At the same time, neighbouring Baden-Württemberg accounted for approximately 13% of both population and districts, and its smallest *Stadtkreis* had 36,582 inhabitants. As a consequence, relatively large districts containing local centres of industry in Baden-Württemberg might, for example, exhibit a lower industry employment share than rural market towns in Bavaria that happened to be their own *Stadtkreis*. The true influence of the location of industry on Foreign Direct Investment could therefore be underestimated in case the latter was attracted to the industrial centre within the large district, rather than the rural market town.

J.1. Merged *Stadtkreise* and *Landkreise*

I merge towns that were their own administrative district (*Stadtkreise*) with surrounding rural districts (*Landkreise*) if the *Stadtkreis* town was the administrative seat of the *Landkreis*.

I violate this rule in two specific cases: Firstly, I treat the *Land* of Bremen as one district, even though the cities of Bremen and Bremerhaven were two separate administrative districts within the *Land* at the time. The *Land* of Bremen had issued foreign currency bonds during the 1920 that had not been amortized completely by 1950. By merging Bremen and Bremerhaven I add one additional district-level observation of outstanding bonded debt to the otherwise low number of district-level observations.

This can be justified by the fact that the *Land* of Hamburg was just one district from an administrative point of view, yet had almost three times the population of Bremen and Bremerhaven combined in 1950. Both city states had outstanding bonded pre-war debt, but one of the two observations would have to be deleted due to the fact that it was composed of two districts instead of one.

Secondly, I do not merge the district of Wesermünde with Bremerhaven, even though its administration was located in the latter city. I thus avoid merging districts from two different *Länder*, as Wesermünde was part of Lower Saxony.

Table J.1.1 – Merged *Stadtkreise* and *Landkreise* by *Länder.*

Stadtkreis	Landkreis	Comments
Baden – Württemberg ⇔ Number of districts reduced from 73 to 65.		
Heilbronn	Heilbronn	
Ulm	Ulm	
Karlsruhe	Karlsruhe	
Heidelberg	Heidelberg	
Mannheim	Mannheim	
Pforzheim	Pforzheim	
Freiburg	Freiburg	
Konstanz	Konstanz	Actually merged in 1953.
Bavaria ⇔ Number of districts reduced from 191 to 149.		
Freising	Freising	
Ingolstadt	Ingolstadt	
Landsberg am Lech	Landsberg am Lech	
München	München	
Rosenheim	Rosenheim	
Traunstein	Traunstein	
Deggendorf	Deggendorf	
Landshut	Landshut	
Passau	Passau	
Straubing	Straubing	
Amberg	Amberg	
Neumarkt in der Oberpfalz	Neumarkt in der Oberpfalz	
Regensburg	Regensburg	
Bamberg	Bamberg	
Bayreuth	Bayreuth	
Coburg	Coburg	
Forchheim	Forchheim	
Hof	Hof	

Stadtkreis	Landkreis	Comments
Kulmbach	Kulmbach	
Ansbach	Ansbach	
Eichstätt	Eichstätt	
Erlangen	Erlangen	
Fürth	Fürth	
Nürnberg	Nürnberg	
Rothenburg ob der Tauber	Rothenburg ob der Tauber	
Schwabach	Schwabach	
Weißenburg in Bayern	Weißenburg in Bayern	
Aschaffenburg	Aschaffenburg	
Bad Kissingen	Bad Kissingen	
Kitzingen	Kitzingen	
Schweinfurt	Schweinfurt	
Würzburg	Würzburg	
Augsburg	Augsburg	
Dillingen an der Donau	Dillingen an der Donau	
Günzburg	Günzburg	
Kaufbeuren	Kaufbeuren	
Kempten im Allgäu	Kempten im Allgäu	
Memmingen	Memmingen	
Neuburg an der Donau	Neuburg an der Donau	
Neu-Ulm	Neu-Ulm	
Nördlingen	Nördlingen	
Lindau	Lindau	
Rhineland – Palatinate ⇔ Number of districts reduced from 51 to 39.		
Koblenz	Koblenz	
Trier	Trier	
Mainz	Mainz	
Worms	Worms	
Frankenthal in der Pfalz	Frankenthal in der Pfalz	
Kaiserslautern	Kaiserslautern	
Landau in der Pfalz	Landau in der Pfalz	
Ludwigshafen am Rhein	Ludwigshafen am Rhein	
Neustadt an der Weinstraße	Neustadt an der Weinstraße	Alternatively Neustadt/Haardt
Pirmasens	Pirmasens	
Speyer	Speyer	
Zweibrücken	Zweibrücken	
Hesse ⇔ Number of districts reduced from 48 to 41.		
Darmstadt	Darmstadt	
Gießen	Gießen	
Offenbach am Main	Offenbach am Main	

Stadtkreis	Landkreis	Comments
Fulda	Fulda	
Kassel	Kassel	
Marburg an der Lahn	Marburg an der Lahn	
Hanau am Main	Hanau am Main	
North Rhine – Westphalia ⇔ Number of districts reduced from 94 to 85.		
Leverkusen	Rhein-Wupper-Kreis	Separate after April 1, 1955.
Bonn	Bonn	
Köln	Köln	
Aachen	Aachen	
Münster in Westfalen	Münster in Westfalen	
Recklinghausen	Recklinghausen	
Bielefeld	Bielefeld	
Herford	Herford	
Iserlohn	Iserlohn	
Siegen	Siegen	
Lower Saxony ⇔ Number of districts reduced from 76 to 65.		
Hameln	Hameln-Pyrmont	
Hannover	Hannover	
Göttingen	Göttingen	
Hildesheim	Hildesheim-Marienburg	
Celle	Celle	
Lüneburg	Lüneburg	
Wolfsburg	Gifhorn	Separate after October 1, 1951.
Osnabrück	Osnabrück	
Braunschweig	Braunschweig	
Goslar	Goslar	
Oldenburg	Oldenburg	
Bremen ⇔ Number of districts reduced from 2 to 1.		
Bremen	Bremerhaven	
Schleswig – Holstein ⇔ Number of districts reduced from 21 to 20.		
Flensburg	Flensburg	
Total West Germany ⇔ Number of districts reduced from 557 to 466.		

J.2. Adjusting 1935 data for 1950 district borders

District-level control variables based on 1935 turnover tax data need to be adjusted for district border changes that occurred between 1935 and 1950. I do this for the districts concerned by redistributing the 1935 tax data using the population shares of 1933 districts in 1950 districts.

In practice, I collect the population of municipalities located in the respective districts from the official register of German municipalities (*Amtliches Gemeindeverzeichnis*), which provides population figures from the 1933 population census[163]. I then redistribute municipalities according to the district they belonged to in 1950, and sum up the population of all municipalities transferred from one particular 1933 district to the 1950 district under consideration. The share of these municipalities in the total 1933 population of the original district equals the population weight used for redistributing the 1935 tax data. For example, municipalities making up 5.09% of the 1933 population of the *Oberamt Ludwigsburg* had become part of the city of *Stuttgart* in 1950. I therefore take 5.09% of the 1935 tax figure of *Oberamt Ludwigsburg* and add it to the original 1935 tax figure of *Stuttgart*, in order to construct the adjusted 1935 data for *Stuttgart*.

This adjustment method rests on three assumptions: Firstly, total population did not shift to any significant degree among municipalities during the two years in between 1933 and 1935. Secondly, turnover tax revenue was distributed uniformly across municipalities within a district. Thirdly, individual municipalities were not split up in the process of redrawing district borders. The first assumption is justified by the absence of large-scale, intra-German population upheavals during the early 1930s. The second assumption is strong, but improves upon the alternative adjustment method of using territory rather than population weights. Given the preponderance of low mountain ranges across West Germany, I expect economic turnover to be more highly correlated with population than with territory. The third assumption is mild, as the administrative partitioning of Germany was very fine prior to the 1970s. The vast majority of municipalities in 1933 had a population ranging between 100 and 1,000 inhabitants.

The population shares given in the following table add up to one for each 1933 district, except for the case that the Federal Republic as a whole lost or gained population compared to the entirety of its constituent districts in 1933. The district of *Saarburg*, for example, lost approximately 30% of its 1933 population to the *Saarland* – effectively a part of France until 1956 – which had been enlarged relative to the interwar *Saargebiet*. In contrast, 2.76% of the 1933 population of the Schönberg district of Mecklenburg lived in enclaves in later West Germany which the Soviet occupation authorities exchanged for Western enclaves in the Soviet Zone in 1945.

[163] Statistisches Reichsamt (1936a). Amtliches Gemeindeverzeichnis für das Deutsche Reich auf Grund der Volkszählung 1933, Verlag für Sozialpolitik, Wirtschaft und Statistik GmbH.

Table J.2.1 – Population shares of 1933 districts in 1950 districts.

1950 districts	1933 districts	Share
Stuttgart	Stadt Stuttgart	1
	Oberamt Eßlingen	0,0217
	Oberamt Ludwigsburg	0,0509
	Oberamt Stuttgart-Amt	0,5248
Backnang	Oberamt Backnang	1
	Oberamt Marbach	0,2537
	Oberamt Gaildorf	0,6106
	Oberamt Welzheim	0,0351
Böblingen	Oberamt Böblingen	0,9826
	Oberamt Herrenberg	0,7780
	Oberamt Stuttgart-Amt	0,1235
Esslingen	Oberamt Eßlingen	0,9370
	Oberamt Schorndorf	0,0807
	Oberamt Stuttgart-Amt	0,3517
	Oberamt Kirchheim	0,0360
	Oberamt Göppingen	0,0385
Heilbronn	Oberamt Heilbronn	1
	Oberamt Neckarsulm	1
	Oberamt Marbach	0,1384
	Oberamt Brackenheim	0,9543
	Oberamt Besigheim	0,2572
	Amtsbezirk Sinsheim	0,0233
Leonberg	Oberamt Leonberg	1
	Oberamt Böblingen	0,0174
	Oberamt Vaihingen	0,0646
Ludwigsburg	Oberamt Ludwigsburg	0,9491
	Oberamt Besigheim	0,7428
	Oberamt Marbach	0,6079
	Oberamt Vaihingen	0,1815
	Oberamt Waiblingen	0,0348
Vaihingen	Oberamt Vaihingen	0,7538
	Oberamt Maulbronn	1
	Oberamt Brackenheim	0,0457
Waiblingen	Oberamt Waiblingen	0,9652
	Oberamt Schorndorf	0,8851
	Oberamt Welzheim	0,4628
Balingen	Oberamt Balingen	1
	Oberamt Sulz	0,1860
	Oberamt Rottweil	0,0870
	Oberamt Spaichingen	0,1729

1950 districts	1933 districts	Share
Calw	Oberamt Calw	1
	Oberamt Nagold	0,9028
	Oberamt Neuenbürg	1
Freudenstadt	Oberamt Freudenstadt	1
	Oberamt Nagold	0,0346
	Oberamt Horb	0,0508
	Oberamt Oberndorf	0,0951
	Oberamt Sulz	0,0427
Horb	Oberamt Horb	0,9492
	Oberamt Sulz	0,6591
	Oberamt Rottenburg	0,0452
	Oberamt Nagold	0,0626
Nürtingen	Oberamt Nürtingen	1
	Oberamt Kirchheim	0,9107
	Oberamt Urach	0,0265
	Oberamt Tübingen	0,0118
	Oberamt Eßlingen	0,0413
Reutlingen	Oberamt Reutlingen	1
	Oberamt Tübingen	0,0982
	Oberamt Urach	0,7693
Rottweil	Oberamt Rottweil	0,9130
	Oberamt Spaichingen	0,0404
	Oberamt Oberndorf	0,9049
	Oberamt Sulz	0,1123
	Oberamt Tuttlingen	0,0219
Tübingen	Oberamt Tübingen	0,8900
	Oberamt Herrenberg	0,2220
	Oberamt Rottenburg	0,9548
Tuttlingen	Oberamt Spaichingen	0,7867
	Oberamt Tuttlingen	0,9781
Aalen	Oberamt Aalen	0,9592
	Oberamt Neresheim	0,7844
	Oberamt Ellwangen (Jagst)	0,9203
Crailsheim	Oberamt Crailsheim	1
	Oberamt Gerabronn	0,8739
	Oberamt Künzelsau	0,0285
Schwäbisch Gmünd	Oberamt Gmünd	0,9784
	Oberamt Welzheim	0,4273
	Oberamt Gaildorf	0,1835
	Oberamt Aalen	0,0408
	Oberamt Göppingen	0,0031

1950 districts	1933 districts	Share
Schwäbisch Hall	Oberamt Hall	1
	Oberamt Künzelsau	0,0634
	Oberamt Ellwangen	0,0797
	Oberamt Öhringen	0,0537
	Oberamt Gaildorf	0,2059
	Oberamt Gerabronn	0,0211
Heidenheim	Oberamt Heidenheim	1
	Oberamt Neresheim	0,2156
	Oberamt Ulm	0,0296
Künzelsau	Oberamt Künzelsau	0,9081
Mergentheim	Oberamt Mergentheim	1
	Oberamt Gerabronn	0,1051
Öhringen	Oberamt Öhringen	1
Biberach	Oberamt Biberach	0,9940
	Oberamt Laupheim	0,6730
	Oberamt Leutkirch	0,2479
	Oberamt Waldsee	0,3623
Ehingen	Oberamt Ehingen	0,9368
	Oberamt Biberach	0,0060
	Oberamt Riedlingen	0,0945
	Oberamt Münsingen	0,0202
	Oberamt Blaubeuren	0,1459
Göppingen	Oberamt Göppingen	0,9584
	Oberamt Kirchheim	0,0533
	Oberamt Geislingen	0,9111
	Oberamt Schorndorf	0,0342
	Oberamt Gmünd	0,0216
	Oberamt Welzheim	0,0748
Münsingen	Oberamt Münsingen	0,9798
	Oberamt Urach	0,2042
	Oberamt Geislingen	0,0322
	Oberamt Ehingen	0,0055
Ravensburg	Oberamt Ravensburg	1
	Oberamt Waldsee	0,5703
	Oberamt Saulgau	0,0338
Saulgau	Oberamt Riedlingen	0,9055
	Oberamt Saulgau	0,9662
Tettnang	Oberamt Tettnang	0,9755
Ulm	Oberamt Ulm	0,9704
	Oberamt Laupheim	0,3270
	Oberamt Geislingen	0,0567
	Oberamt Blaubeuren	0,8541

1950 districts	1933 districts	Share
Ulm (continued)	Oberamt Ehingen	0,0577
Wangen	Oberamt Wangen	1
	Oberamt Leutkirch	0,7521
	Oberamt Waldsee	0,0674
	Oberamt Tettnang	0,0245
Konstanz	Amtsbezirk Konstanz	1
	Amtsbezirk Engen	0,5971
Donaueschingen	Amtsbezirk Donaueschingen	1
	Amtsbezirk Engen	0,3265
Stockach	Amtsbezirk Stockach	1
	Amtsbezirk Engen	0,0765
	Amtsbezirk Meßkirch	1
Überlingen	Amtsbezirk Überlingen	1
	Amtsbezirk Pfullendorf	1
Müllheim	Amtsbezirk Müllheim	1
	Amtsbezirk Staufen	0,6677
Freiburg	Amtsbezirk Freiburg	1
	Amtsbezirk Staufen	0,3323
	Amtsbezirk Waldkirch	0,0933
Emmendingen	Amtsbezirk Emmendingen	1
	Amtsbezirk Waldkirch	0,9067
Lörrach	Amtsbezirk Lörrach	1
	Amtsbezirk Schopfheim	0,8066
Neustadt/Schwarzwald	Amtsbezirk Neustadt/Schwarzwald	1
	Amtsbezirk Schopfheim	0,0296
Säckingen	Amtsbezirk Säckingen	1
	Amtsbezirk Schopfheim	0,1638
Offenburg	Amtsbezirk Offenburg	1
	Amtsbezirk Oberkirch	1
Karlsruhe	Amtsbezirk Karlsruhe	1
	Amtsbezirk Bretten	0,5544
	Amtsbezirk Ettlingen	1
Bruchsal	Amtsbezirk Bruchsal	1
	Amtsbezirk Bretten	0,2072
Sinsheim	Amtsbezirk Sinsheim	0,9767
	Amtsbezirk Bretten	0,2158
	Kreis Heppenheim	0,0560
Pforzheim	Amtsbezirk Pforzheim	1
	Amtsbezirk Bretten	0,0226
Mannheim	Amtsbezirk Mannheim	1
	Amtsbezirk Weinheim	1

1950 districts	1933 districts	Share
Heidelberg	Amtsbezirk Heidelberg	1
	Amtsbezirk Wiesloch	1
Buchen	Amtsbezirk Buchen	1
	Amtsbezirk Adelsheim	1
Tauberbischofsheim	Amtsbezirk Tauberbischofsheim	1
	Amtsbezirk Wertheim	1
Marktredwitz	Stadt Marktredwitz	1
	Bezirksamt Wunsiedel	0,0353
Wunsiedel	Bezirksamt Wunsiedel	0,9647
Coburg	Bezirksamt Coburg	1
	Stadt Rodach bei Coburg	1
Mellrichstadt	Bezirksamt Mellrichstadt	1
	Kreis Meiningen (Land Thüringen)	0,0415
Grafenau	Bezirksamt Grafenau	1
	Bezirksamt Deggendorf	0,0041
Neustadt/Waldnaab	Bezirksamt Neustadt an der Waldnaab	1
	Bezirksamt Kemnath	0,0058
Oberviechtach	Bezirksamt Oberviechtach	1
	Bezirksamt Vohenstrauß	0,0092
Regensburg	Bezirksamt Regensburg	0,9889
	Bezirksamt Roding	0,0144
Straubing	Bezirksamt Straubing	1
	Bezirksamt Regensburg	0,0111
Waldmünchen	Bezirksamt Waldmünchen	1
	Bezirksamt Cham	0,0059
Deggendorf	Bezirksamt Deggendorf	0,9959
Kemnath	Bezirksamt Kemnath	0,9942
Vohenstrauß	Bezirksamt Vohenstrauß	0,9908
Roding	Bezirksamt Roding	0,9856
Cham	Bezirksamt Cham	0,9941
Gießen	Kreis Gießen	1
	Kreis Schotten	0,1716
Büdingen	Kreis Büdingen	1
	Kreis Schotten	0,5519
Lauterbach	Kreis Lauterbach	1
	Kreis Schotten	0,1058
Alsfeld	Kreis Alsfeld	1
	Kreis Schotten	0,1706
Bergstraße	Kreis Heppenheim	0,9440
	Kreis Bensheim	0,8756
Darmstadt	Kreis Darmstadt	1
	Kreis Bensheim	0,1244

1950 districts	1933 districts	Share
Darmstadt (continued)	Kreis Dieburg	0,0666
Dieburg	Kreis Dieburg	0,9334
Witzenhausen	Kreis Witzenhausen	0,9854
Alzey	Kreis Alzey	0,7812
	Kreis Oppenheim	0,3705
	Kreis Worms	0,0277
Bingen	Kreis Bingen	1
	Kreis Oppenheim	0,0157
	Kreis Alzey	0,2188
Mainz	Kreis Mainz	1
	Kreis Oppenheim	0,6138
Worms	Kreis Worms	0,9723
Birkenfeld	Land Oldenburg - Landesteil Birkenfeld	0,8062
	Kreis Sankt Wendel-Baumholder (Rest)	0,9266
Saarburg	Kreis Saarburg	0,7077
	Kreis Trier	0,1329
Trier	Kreis Trier	0,7847
Kusel	Bezirksamt Kusel	0,9580
Zweibrücken	Bezirksamt Zweibrücken	0,9116
Ludwigshafen	Bezirksamt Ludwigshafen	1
	Bezirksamt Frankenthal (Pfalz)	0,2181
Frankenthal (Pfalz)	Bezirksamt Frankenthal (Pfalz)	0,7819
Jülich	Kreis Jülich	1
	Kreis Erkelenz	0,0460
Erkelenz	Kreis Erkelenz	0,9540
Lippstadt	Kreis Lippstadt	1
	Kreis Detmold	0,0178
Detmold	Kreis Detmold	0,9822
Osterholz	Kreis Osterholz	0,7890
Verden	Kreis Verden	0,7887
Blankenburg (Nieders.)	Kreis Blankenburg	0,2437
Osterode am Harz	Kreis Osterode am Harz	1
	Kreis Grafschaft Hohenstein (Provinz Sachsen)	0,0622
Hildesheim-Marienburg	Kreis Hildesheim	1
	Kreis Marienburg	0,8851
	Kreis Gandersheim	0,0241
Wolfenbüttel	Kreis Wolfenbüttel	0,8278
	Kreis Marienburg	0,1149
	Kreis Wernigerode (Provinz Sachsen)	0,0424
Gandersheim	Kreis Gandersheim	0,9706
Peine	Kreis Peine	1
	Landkreis Braunschweig	0,0124

1950 districts	1933 districts	Share
Braunschweig	Kreis Braunschweig	0,9876
Helmstedt	Kreis Helmstedt	0,9729
	Landkreis Haldensleben (Provinz Sachsen)	0,0036
Land Hadeln	Kreis Land Hadeln	1
	Hamburgisches Landgebiet	0,0156
Cuxhaven	Hamburgisches Landgebiet	0,2937
Harburg	Kreis Harburg	0,7840
Stade	Kreis Stade	0,9922
Goslar	Kreis Goslar	0,8000
	Kreis Gandersheim	0,0053
Salzgitter	Kreis Goslar	0,2000
	Kreis Wolfenbüttel	0,1375
Bremen	Land Bremen	1
	Stadtkreis Wesermünde	1
	Landkreis Osterholz	0,2110
	Landkreis Verden	0,2113
Hamburg	Stadt Hamburg	1
	Stadt Altona	1
	Stadt Harburg-Wilhelmsburg	1
	Stadt Wandsbek	1
	Hamburgisches Landgebiet	0,6129
	Kreis Stormarn	0,4976
	Kreis Pinneberg	0,1534
	Kreis Harburg	0,2160
	Kreis Stade	0,0078
Herzogtum Lauenburg	Kreis Herzogtum Lauenburg	0,9819
	Hamburgisches Landgebiet	0,0595
	Kreis Schönberg (Mecklenburg)	0,0276
	Landgebiet Lübeck	0,7305
Stormarn	Kreis Stormarn	0,5024
	Hamburgisches Landgebiet	0,0183
Pinneberg	Kreis Pinneberg	0,8466
Eutin	Land Oldenburg - Landesteil Lübeck	1
	Landgebiet Lübeck	0,1946

Eidesstattliche Erklärung

Hiermit erkläre ich, die vorliegende Dissertation selbstständig angefertigt und mich keiner anderen als der in ihr angegebenen Hilfsmittel bedient zu haben. Insbesondere sind sämtliche Zitate aus anderen Quellen als solche gekennzeichnet und mit Quellenangaben versehen.

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Lebenslauf

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