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the German and Swedish Language Areas**

by

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No 288: The Baltic Exchange: Mutual Influences between Economists in the German and Swedish Language Areas

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Abstract: In the 19th and 20th centuries economists of the German and Swedish language areas strongly influenced each other and made significant contributions to the development and critique of neoclassical economics. In our paper, we focus on the prominent contributions of Wicksell, Cassel, Hayek and Myrdal, but consider also others, such as Lutz, Neisser, Palander and Schneider. It might look far fetched to describe their interaction as a “Baltic exchange”, since (for example) Vienna is not part of that region. But history and geographical proximity made German the scientific language for Scandinavian academics in the 19th century, helping Swedish economists to spread their ideas widely on the Continent, before they made an impact in the English language area. Much of the interaction happened indeed close to the Baltic Sea. In the paper we discuss the German influence on Swedish economics that occurred mainly before the First World War, and the Swedish influence on German economics, mainly thereafter. We provide biographical, bibliographical and textual evidence for an exchange of ideas that has stimulated the development of economics far beyond the Baltic Sea.

Keywords: Germany; Sweden; influence; history of economic thought

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The Baltic Exchange: Mutual Influences between Economists in the German and Swedish Language Areas

by

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1 Introduction

The title of the paper is a bit of a red herring, but surely an attractive one. “The Baltic Exchange” is the name of a venerable British company that, seated in the City of London, operates the leading global marketplace for ship brokers, owners and charterers. It is hard to imagine that influences of Austrian, German or Swedish economists could be spotted there, let alone mutual ones. The Baltic Exchange has, however, its historical roots in the Baltic Sea trade, in the shipping of bulk commodities such as lumber, grain, salt and, yes, herring. Between the 13th and 16th Centuries, this trade had been organized and controlled by the Hanseatic League. Low German (*niederdeutsch*) was the language of commerce and politics all around the Baltic Sea. There may have been exchanges of important economic ideas between Germans and Swedes involved in the Hanseatic trade, but we have to keep them out of this paper for reasons of ignorance (ours, perhaps also theirs).

With the rise of the nation states in the region, the Hanseatic League ceded its power to Sweden which came to dominate the region between the late 16th and the early 18th Centuries. During the Thirty Years’ War, Swedish armies went on long

¹ Paper presented at the annual meetings of the *Dogmenhistorischer Ausschuss des Vereins für Socialpolitik* at Lüdinghausen, 31 May – 2 June 2007. We have received helpful comments from many of the participants and from a seminar in Gotheburg, and we gratefully acknowledge the references, suggestions and inspiration we have received from correspondence with Karl Häuser and Axel Leijonhufvud. We wish to thank Friederike Bindick for valuable research assistance.

excursions through Germany. In accordance with the Westphalian peace treaty (1648), Sweden annexed Pomerania and other coastal regions in Northern Germany, remaining in control of some of these regions until Napoleonic times. The advanced systems of civil and military administration that the Swedes introduced to their new provinces became role models for the Prussian art of governing. At academic levels, an organized exchange between the Swedish and German language areas had already evolved shortly after the foundation of the University of Greifswald in 1456. In the seven decades before the Reformation, 476 of its students, 22 of its professors and six of its rectors were Scandinavians,² most of them probably from Sweden (including its southernmost provinces which then were under Danish rule). When Pomerania came under Swedish rule in 1648, Greifswald attained the status not only of Sweden's oldest university,³ but also of the Continental stage in the training circuit of many Swedish academics.⁴ This was one of the contributing factors, though probably not the decisive one, for making German the primary scientific language used by many Swedish scientists until the 1920s (of which more below).

There was certainly a Baltic exchange of economic ideas in the 17th and 18th Centuries, between the German and Swedish (as well as English, Dutch, Danish and Russian) language areas. One of the most prominent names is *Samuel von Pufendorf* (1632-1694) who, after studies in Leipzig and Jena and six years of teaching law in Heidelberg, was called to the newly founded Lund University in 1668. There he published his *opus magnum*, *De jure naturae et gentium libro octo* (1672) and other works, before moving on to Stockholm in 1677 and spending his last years in Berlin, after 1688. His views on civil society and markets – society being established by contracts between individuals under the sovereignty of a benevolent ruler, and market relations being formed on the base of the dual determination of the value in

² "Ernst-Moritz-Arndt-Universität Greifswald", *wikipedia.org* – download 16 May 2007.

³ Lund University could make claims to priority by referring to the existence of a *Studium generale* between 1438 and 1536, in the Danish times and prior to Reformation; however, the university as a full-scale permanent institution was founded only in 1668. Uppsala University was founded in 1477, Dorpat University (now Tartu) in 1632, and Åbo Academy (Turku) in 1640.

⁴ In the mid-18th Century, about 60 per cent of the students at Greifswald came from mainland Sweden; cf. Sörlin (1994: 128). Before the Thirty Years' War, Rostock had attracted more Swedish students than Greifswald, but after the war the University of Rostock fell in decline.

use and value in exchange – made an impact on German Cameralism on the one hand, and on Adam Smith on the other (Schumpeter 1954, Sandelin 1987). Schumpeter (1954: 122) goes as far as describing Pufendorf’s 1672 treatise as “an embryonic *Wealth of Nations*.” Another prominent name in the Baltic exchange of economic ideas is *Pehr Niclas Christiernin* (1725-1799), professor and sometimes rector of Uppsala University, who developed a version of the quantity theory of money that was more sophisticated than the better-known approach of David Hume (1754). It included a self-regulating mechanism of flexible exchange rates, based on Sweden’s experiences of an inconvertible currency during long periods in the 18th Century. Christiernin’s approach made an impact on monetary policy debates in Northern Europe, long before the classical bullionist controversy took place in England (Eagly 1971, Persson and Siven 1993).⁵

In our paper, however, we will not dwell on the preclassical era. Instead we set the focus on the late 19th and early 20th Centuries, when economists of the German and Swedish language eras influenced each other and made significant contributions to the development and critique of neoclassical economics. The prominent names are Knut Wicksell, Gustav Cassel, Friedrich August von Hayek and Gunnar Myrdal, but numerous others – such as Gustaf Steffen, Friedrich Lutz, Hans Neisser, Tord Palander, and Erich Schneider – will also play a role in our account. It might look far fetched to describe the mutual influences of all these writers as a “Baltic exchange”, since (for example) Vienna is not part of that region. But the historical background and geographical proximity undoubtedly contributed to making German the scientific language for Northern European academics before the First World War. Publishing in German, Swedish economists spread their ideas widely on the Continent, before they made an impact in the English language area. Moreover, as we will see, much of the interaction happened indeed relatively close to the Baltic Sea.

In the following we will first discuss the German influence on Swedish economics (section 2), and then the Swedish influence on economic thinking and teaching in Germany (section 3), before we compare the influences and conclude

⁵ One who introduced teaching in practical economics in the western part of Sweden was Friedrich Christoph Wurmbs. He took part in the establishment of a commercial academy in Hamburg in 1768, but having private economic problems he moved to Sweden where he started a boarding school in Öringe in southern Halland (Lönnroth 2007).

(section 4). Our paper is not quite symmetric; as a result of an international division of labour it makes use of comparative advantages.⁶ These will become obvious in due course.

2 The German Influence on Swedish Economics

2.1 *The First Generation of Modern Swedish Economists*

According to Jonung (1992), “[t]he history of Swedish economics is basically the history of its professors”. Modern economic studies were introduced in Swedish academia about one hundred years ago,⁷ and for a long time there were only few chairs in this subject. The character of the discipline, at any rate in its early periods, can thus be relatively easily captured by describing the role and achievements of these chairholders. In 1902 there were just two economics professors in the country, namely David Davidson (1854-1942) in Uppsala and Knut Wicksell (1851-1926) in Lund. In 1910 the number had increased to five, since new chairs had been filled in Göteborg in 1903 by Gustaf Steffen (1864-1929), at Stockholm University in 1904 by Gustav Cassel (1866-1945), and at the Stockholm School of Economics in 1909 by Eli Heckscher (1879-1952). These five professors defined the content of economics in Sweden until the 1920s. They were largely, but not exclusively, influenced by German scholars. With the exception of Heckscher, they had made long study tours to Germany.⁸

David Davidson was born in a Jewish family; both of his parents came from Gemany. He became domestically important, but is internationally almost unknown,

⁶ We leave it open to which degree our pattern of specialization can be explained by using the approach of those famous old Swedes, Eli Heckscher and Bertil Ohlin.

⁷ It should be noted that German and Swedish universities were, to the best of our knowledge, the first in the world to have chairs in “oconomia”. The chronological order is, according to Liedman (1986): Halle 1727, Frankfurt/Oder 1727, Rinteln 1730, Uppsala 1741, Åbo 1747, Lund 1750, Uppsala II 1759. This older tradition of economic studies was closely related to Mercantilism and did generally not last long into the 19th Century.

⁸ Davidson’s, Steffens’s, Wicksell’s, and Cassel’s studies in Germany are described in four chapters in Carlson (1995). Outside the group of prospective professors, Johan Leffler (1845-1912) had studied for Roscher in Leipzig. Sven Helander became dr rer. pol. in Freiburg in 1914, docent at the University of Gothenburg in 1916, competed without success for a chair att the business school in Gothenburg, and ended as professor at the Handelshochschule in Nürnberg 1929-1945.

partly because he wrote only in Swedish, predominantly in the *Ekonomisk Tidskrift*,⁹ which he created in 1899, and in government reports. Davidson was only 24 years old, when he took his doctoral degree in Uppsala with his short thesis (60 pages) on capital theory (*Bidrag till läran om de ekonomiska lagarna för kapitalbildningen*, 1878). On the first page he gave a list of “utilized sources” with one French (Anne-Robert Turgot), two English (Adam Smith and John Stuart Mill), and six German-language sources. The latter are Friedrich Hermann’s *Staatswirtschaftliche Untersuchungen*, C. L. Moll’s *Der Wert*, Carl Menger’s *Grundsätze der Volkswirtschaftslehre*, Carl Knies’s *Geld und Kredit*, Karl Marx’s *Das Kapital*, and Hans Karl Emil von Mangoldt’s *Volkswirtschaftslehre*. This is well in line with Heckscher’s ([1951] 1998: 33-34) conclusion about Davidson’s thesis: “The classical writers of Western Europe are not altogether excluded ... but there is no doubt that pride of place is given to the best of the German-speaking theorists.”

In 1879 Davidson got a grant and went to Heidelberg to attend Knies’s courses on monetary theory, which he appreciated very much.¹⁰ He was influenced, and wrote in a letter: “[S]ince I have read Knies’s publications, and even more since I have heard his lectures, I begin to be converted to his doctrines, but not yet completely” (Carlson 1995: 106). In 1886 Davidson got another grant and took leave to study income tax legislation in Bremen, Hamburg, Lübeck and the Swiss canton of Basel (Uhr 1991). Tax legislation became one of Davidson’s special fields, and he exerted an influence on the Swedish tax system during several decades. No doubt, German authors played a significant role in Davidson’s thought, especially during his young days. Later in his life, he became more interested in British classical economists and wrote several pieces on Ricardian value theory.

Knut Wicksell came to economics quite late, after having studied philosophy, history, Latin, Scandinavian languages, mathematics and physics, and after having established himself as an iconoclast in public debate (Gårdlund 1958). He made long study tours to London, Berlin and Straßburg in the 1880s. German authors like Adolph Wagner and Wilhelm Lexis play a role in his doctoral thesis *Zur Lehre von der Steuerincidenz*, but hardly as important as David Ricardo and Eugen von Böhm-

⁹ *Ekonomisk Tidskrift* is one of the oldest and most influential economic journals that, after a ten years’ interlude as *Swedish Journal of Economics*, was transformed into the *Scandinavian Journal of Economics* in 1976; for its history see Persson (1998).

¹⁰ On Knies’s monetary theory see Häuser (1996) and Trautwein (2003).

Bawerk. The doctoral thesis constitutes the first part of his larger book *Finanztheoretische Untersuchungen nebst Darstellung und Kritik des Steuerwesens Schwedens* (1896). The second part of the book, "Über ein neues Prinzip der gerechten Besteuerung", is no doubt the part which has attracted most attention by the posterity. It may be regarded as a mature contribution within the new benefit approach to taxation and public expenditures, where the Italians Maffeo Pantaleoni, Ugo Mazzola and Antonio de Viti de Marco, and the Austrian Emil Sax had laid the foundations, and where "the various authors joined in an effort to integrate the determination of taxes and expenditures with the allocation of resources in the market" (Musgrave 1959: 69). After Wicksell, further elaboration of this approach is found in Erik Lindahl's thesis *Die Gerechtigkeit der Besteuerung* (1919).

Wicksell's *Finanztheoretische Untersuchungen* was not his first book on economic theory. In Wicksell's theory of capital, presented in *Über Wert, Kapital und Rente* (1893) and in the first volume of his *Lectures in Political Economy (Föreläsningar i nationalekonomi, 1901)*, the Austrian Böhm-Bawerk is the most important source of inspiration, although Wicksell's approach might be considered as an amalgamation of Böhm-Bawerk, Walras and Jevons.¹¹ Wicksell declared openly in a footnote at the beginning of the second part of *Über Wert* called „Die neue Theorie des Kapitals“: „Ich werde in diesem ganzen Abschnitte die vorzüglichen Arbeiten Böhm-Bawerk's, speziell dessen ‚Positive Theorie des Kapitals‘, die ich wohl als den meisten Lesern bekannt voraussetzen darf, als grundlegend benützen" (1893: 70). His respectful relation to Böhm-Bawerk — which did not hinder him from being critical of, for instance, Böhm-Bawerk's interpretation of the wages-fund — is evinced at several occasions. In an obituary, Wicksell ([1914a] 1997) counted himself among the "earliest and staunchest" proponents of Böhm-Bawerk's capital theory, and in a long paragraph he described vividly how *Positive Theorie des Kapitals* "was a revelation" to him after he had seen the book in the window of a bookshop in Berlin and bought it.

Wicksell adopted an attitude of reserve towards the German Historical School. In *Über Wert, Kapital und Rente*, he criticized its present advocates, unlike its founders, for not daring to draw general conclusions, which was a serious shortcoming: „Wie wertvoll, ja unentbehrlich auch historische Forschungen für jede soziale Wissenschaft und somit für die Nationalökonomik sein mögen, gewinnen sie

¹¹ A review of Böhm-Bawerk's and other marginalist's influence on Swedish thought is found in André (1994).

wohl diesen Wert nur, insofern es ihnen gelingt, die allgemeinen Gesetze anzuzeigen und zu beleuchten, welche das menschliche Handeln leiten und lenken...“ In a footnote, he explains: „Dies war auch, wenn ich nicht irre, eben das Hauptziel der bedeutenden Männer, welche wie Hildebrand, Roscher, Knies u. a. die geschichtliche Schule in Deutschland inauguriert haben. Die erwähnte Einsichtigkeit ist wohl eigentlich auf die Rechnung ihrer Epigonen zu schreiben, die sich mehr und mehr in historische Spezialforschungen vertieften und dabei schließlich beinahe alle Theorie haben verwerfen wollen“ (1893: 3).

Wicksell could not, however, neglect the Historical School, and he discusses its advantages and drawbacks in his *Lectures (Föreläsningar i nationalekonomi, 1901)* as well as in his inaugural lecture (1904). In the latter he concludes, after having given credit to the school's contribution to historical and statistical knowledge: “But because of its one-sidedness and the purely negative, harshly deprecatory, even conceited and offensive attitude which it always adopts towards contemporary research of the theorising and systematising sort, this school has, in my opinion, hindered and damaged the development of economics, especially in Germany...”

Gustaf Steffen filled the first chair in Göteborg in 1903. It was a chair in economics and sociology; sociology was added in order to favour Steffen and to exclude Cassel (Lilliestam 1960: 88). In the 1880s, Steffen had studied first chemistry, physics and mineralogy in Aachen, and then political economy in Berlin. He visited a few lectures of Wagner and Gustav Schmoller. Their teaching did not, however, immediately and completely absorb Steffen into the Historical School. At the end of the 1880s he moved to London and learnt about Jevons's mathematical and positivistic economic theory. He sent an enthusiastic report to a Finnish journal where he talked about the “rebirth of the science of economics” and “a theory of economic conditions as they are, not as they ought to be” (Lönnroth 1998: 263-265, Carlson 2002: 143-154). In the 1890s, Steffen wrote books about wage labour in the tradition of the German Historical School; they were translated and in revised versions published in Germany, too. He took his doctoral degree in Rostock in 1902 with a German version of a work on English wage-earners. In an article in 1903, Steffen described the content of his academic subject. He praised the German Historical School and called Schmoller “perhaps the most profound sociological thinker among living economists” (Lönnroth 1998: 268). Wagner, too, is lauded in this and other articles. Steffen's broad achievements included a period as a member of the parliament, where he represented the Social Democratic Party. He was,

however, expelled from the party in 1915 for being heretical and suspected of supporting those who argued for Sweden's participation in the war on the German side. As an economist, Steffen can be characterized as a Swedish *Kathedersozialist* who had almost no influence on the subsequent development of the discipline in Sweden.

Gustav Cassel became the first professor of political economy at Stockholm University in 1904. He had defended a doctor's thesis in mathematics ten years earlier, but soon turned to economics. At several occasions he displayed a critical attitude towards the ways in which mathematics was used in economics, and he used it sparingly himself. In a letter in 1896, for instance, he stated after having read Wicksell's *Finanztheoretische Untersuchungen*: "As far as I can understand, it is not possible to carry economics a step forward trying in this way to give it a semblance of mathematical perfection. Especially when one does like certain Germans – who always will carry everything to absurdity – and sets all hypothetical functions = linear... It's mathematically trained thinking, not mathematics, that is needed to penetrate deeply into the economic questions" (cited in Nycander 2005: 16-17).

At the beginning of his economic studies, Cassel had gone to Germany. He spent the summer of 1898 in Tübingen, a place which he liked for its mountains and shady platane avenues. "The economic teaching, on the contrary, I found most unsatisfactory and almost ridiculous", he explained in his autobiographic *I förnuftets tjänst* (1940) (In the service of reason). He was critical of Gustav von Schönberg's seminar and Friedrich Julius von Neumann's lectures on "worthless" concepts of value, but convinced of his own capability and greatness: "During these weeks, my decision to abolish the whole theory of value and build up an economic theory directly on a study of price formation came to maturity" (Cassel 1940: 15).

He started immediately his work on "Grundriss einer elementaren Preislehre" (1899), which was accepted by Schäffle for publication in the *Zeitschrift für die gesamte Staatswissenschaft*. This was an article in the spirit of Walras, as explained in the introduction: „Von den Verfassern, die so gewissermassen als meine Vorgänger zu betrachten sind, sei hier nur *Walras* erwähnt. Dass dieser sich durch einen überaus schwerfälligen, mathematischen Apparat einen grösseren Leserkreis selbst verschlossen hat, ist sehr zu beklagen. Dem Leser, für den das Walrassche Werk deshalb ein Buch mit sieben Siegeln bleibt, hoffe ich gelegentlich eine Vorstellung von seinen wichtigsten Grundgedanken geben zu können" (1899: 396). A number of

German and other authors are also mentioned in the text, but their influence on Cassel was small compared with Walras's.

Having spent the summer of 1898 in Tübingen, Cassel went with his family to Berlin in the autumn, and registered as a student at the university. He was impressed by Wagner's and Schmoller's "immense erudition and wide reading", but it did not escape his notice "how weak their theoretical elaboration of the subject really was. This pertains especially to Schmoller, who could confine himself to the most superficial line of argument, and who, for his deficient theoretical training, sought shelter in his superior historical knowledge."

Cassel concluded with a broad reflection: "Later on, it has become more and more obvious to me how seriously the so-called Historical School neglected the theoretical foundation of the economy. The modern economic life is so complicated that a great nation cannot dispense with a strictly scientific economic training... Germany's weakness during later severe occurrences can to a not insignificant degree be traced back to the Economic-Historical School's disregard of elementary economic theory" (Cassel 1940: 18-19). Cassel declared nevertheless that he got "an extraordinary respect for Wagner's research". In his memoirs of 1940 he seems, however, to have played down the influence that the German Historical School had actually had on his thinking.

In the spring of 1899, the family moved on to Göttingen, where Cassel followed lectures by Lexis and Gustav Cohn. He found that Cohn was a splendid orator, but that the theoretical content of his teaching was extremely weak. When Cassel raised objections to a proposition by Cohn at a seminar on monetary theory, he had to leave the seminar. Cassel's says his objections were "the germ of the theory of the scarcity of the means of payment as the essential foundation of the value of money, which I later on during decades of work would develop to a general monetary theory" (1940: 23).

Cassel's *opus magnum* is his *Theoretische Sozialökonomie* (1918). This work of roughly 650 pages was intended to be the second independent part of a *Lehrbuch der Allgemeinen Volkswirtschaftslehre*, where Ludwig Pohle should write the first, historical and sociological part (which, to our knowledge, was never published). Cassel considered *Theoretische Sozialökonomie* as a furthering of the research programme that he had developed in his Walras-inspired "Grundriss". In *Theoretische Sozialökonomie* he does no longer, however, give Walras the credit, explaining with self-confidence in the introduction: „Auseinandersetzungen mit

anderen Verfassern habe ich in diesem Werke, soweit möglich, vermieden... Da die Theorie auf einer ganz anderen Grundlage als der gewöhnlichen aufgebaut ist, wäre die Erörterung anderer Meinungen wohl auch meistens ziemlich unfruchtbar gewesen..." In his memoirs, too, he seems to deny the significance of Walras, and claims that when he continued to develop his own theory, he "did not find it necessary to occupy [himself] with Walras any more, and [he had], indeed, never more had time to open his books" (1941: 435).

Even if Cassel's most important book *Theoretische Sozialökonomie* hardly refers to German authors, his *early* writings on social policy, competition, taxes and income were influenced by German *Kathedersozialisten*, especially by Wagner (Carlson 1995: 148-150, 2002: 124-135, and Boianovsky and Trautwein 2003). In his book on *Socialpolitik* (1902) Cassel "dissociates himself from liberal principles such as the atomistic view on society, the formal view on the concept of freedom and the belief that free competition leads the evolution in the right direction. In contrast to those principles, he would put 'the organized society' which can use compulsion in order to create more real freedom, and systematic policy to direct the evolution in the desired direction" (Carlson 1995: 149). The influence on Cassel from German *Kathedersozialismus* and English Fabianism vanished, however, around the First World War, when he turned into a marked economic liberal (Carlson 1994: 15).

Eli Heckscher was the youngest of the five 1910-professors, and the one who was least influenced by German sources. Carlson (1994: 15-16) shows that Heckscher himself singled out the domestic scholars Davidson and Harald Hjärne, a historian, as his principal teachers, but mentions that John Stuart Mill, Alfred Marshall and Wicksell are also usually held important for Heckscher's development. In his introduction to the English edition of *Mercantilism* (1935), Heckscher stated that Marshall's *Principles* "was not only the starting-point of my theoretical studies, but also profoundly influenced my approach to economic history". There is, however, no explicit sign of Marshall's influence; it may have been of a more general character (Sandelin 2006). Carlson (2002: 47-48) maintains that even if there is little German influence on Heckscher's thought on economic theory, he felt great respect for the endeavours of the Historical School on the field of social policy.

2.2 *The Second Generation of Modern Swedish Economists*

Following a general trend, and with support from the Rockefeller Foundation, the next generation of Swedish economists more frequently turned their eyes westwards.

The United States became more important, and Germany lost influence. This was, for instance, manifested in study tours. Gösta Bagge (1882-1951) had been a pioneer when he attended Johns Hopkins in Baltimore in 1904-1905. He was followed by Johan Åkerman (1896-1982), who was at Harvard in 1919-1920, like Bertil Ohlin (1899-1979) a few years later. Gunnar Myrdal (1898-1987) chose Columbia University in New York and the University of Wisconsin, where he spent the academic year 1929-1930 (Carlson 1995: 13-14).¹² Erik Lundberg (1907-87) was a Rockefeller fellow for the academic years 1931-33, visiting the Universities of Chicago and Minnesota, Columbia University, the Brookings Institution, and Harvard (Lundberg 1994: 48-66). Tord Palander (1902- 72) spent the year 1936 as Rockefeller fellow at the Cowles Commission at Colorado Springs and in other places in the USA (Puu 1992: 225).

Looking at the country of publication for works cited in the doctoral theses of Åkerman, Myrdal, Ohlin and Lundberg,¹³ we find very low shares for Germany and much higher shares for Britain and especially the USA. In Ohlin's theses, 6 per cent of the cited works were published in Germany and 71 per cent in Britain or the United States. The corresponding numbers for Myrdal's thesis are 13 and 68 per cent, and for Åkerman's thesis 13 and 52 per cent (Sandelin 2001). In Lundberg's 1936 thesis the German share is 21 per cent and the Anglo-Saxon share is 79 per cent (with a high share of emigrants from Germany and Austria, of which more below). Germany and Austria were no longer the countries where those who were to become the leading Swedish economists found their principal inspiration.

Considering Erik Lindahl's (1891-1960) later publications, he may be regarded as an economist in the "de-Germanized" generation. But his doctoral thesis with the complete title *Die Gerechtigkeit der Besteuerung: Eine Analyse der Steuerprinzipien auf Grundlage der Grenznutzentheorie* (1919) was clearly a work within the same Italian-Austrian tradition as Wicksell's study "Über ein neues Prinzip der gerechten Besteuerung" in *Finanztheoretische Untersuchungen*, and German language authors like Rob. Meyers, Max Weber, S. P. Altmann, Rümelin, Chr. Wolf, Emil Sax, Adolph Wagner, Nasse, Vocke and Albert Schäffle play also a role, especially in the introductory discussion on the concept of "Gerechtigkeit". In the core of the thesis,

¹² However, Gunnar Myrdal spent some time in Kiel and Leipzig in the 1920s and regarded Max Weber as a formative influence (Eliæson 2000: 333).

¹³ Palander was a special case insofar as he dealt with location theory which in the early 1930s was largely based on German literature; see also below.

Wicksell and other early marginalists were more important, and the most well-known element - the description of an equilibrium - was Lindahl's original contribution.

Johan Åkerman was an odd person in the sense that he, contrary to most of his contemporary above-mentioned colleagues, cannot be placed within the so-called Stockholm School or mainstream Anglo-Saxon thought. His honorary doctoral degree at Sorbonne is in line with this. In his memoirs he mentions especially Knut Wicksell, Joseph Schumpeter and Thorstein Veblen as those who had a "great influence" on his research (Åkerman 1997: 68). Carlson (1997) gives those credit both for Åkerman's interest in business cycles and for his broad approach. He points at a chart in an article by Åkerman in the *Ekonomisk Tidskrift* (1955) about "Instrumental history of thought", where Åkerman sees two lines from Wicksell (1898). One applies to business cycle research and continues to Spiethoff 1902 and Tinbergen 1939; the other applies to causal analysis and goes to Veblen 1904, Mitchell 1913 and Schumpeter 1911 and 1943. "It was, of course, in the prolongation of these lines that Åkerman wished to place himself" (Carlson 1997: 15).

Erik Dahmén (1916-2005) was a disciple of Johan Åkerman and shared Åkerman's basic view on social research. But he was also directly influenced by Joseph Schumpeter's approach, and during his whole career he reminded those who had the advantage to talk with him of this fact. The Schumpeterian foundation is evinced already in Dahmén's licentiate thesis in 1942, although he did not accept Schumpeter uncritically. Henrikson (1991a: 20) concludes: "Accepting the core idea of innovations as the driving force in the process of economic development and the crucial role of the entrepreneur in that process, he recognized that Schumpeter had here found the key problem of economic development. However, his reactions contained elements of important criticism. Dahmén faulted Schumpeter for not grasping fully the implications of his vision. Schumpeter was, according to Dahmén too tied to the static equilibrium concept. The stationary state remained even in Schumpeter's new work [i.e. *Business Cycles*] the starting point for the analysis of the development process and was still retained also as the end state." This criticism might surprise. Irrespective of this, Schumpeter's *Business Cycles* was no longer an "Austrian" or "German" book, but rather based on Anglo-Saxon and other literature; Wicksell, Cassel, Myrdal, Ohlin, Åkerman and Heckscher are among those to whom Schumpeter pays attention. So here we have already an interaction between Swedish and Austrian/German economists that expands beyond the Baltic into the Atlantic.

Dahmén's doctoral dissertation *Svensk industriell företagarverksamhet* (1950) had a heavy empirical content, but his theoretical approach was still Schumpeterian. In a summary (translated in Carlsson and Henriksson 1991: 49-62) Dahmén states: "The constellation of problems posed in this dissertation are based, to a large extent, on Schumpeter's approach in his *Theory of Economic Development* (1911, 1912) and the *Business Cycles* (1939)."

2.3 Books Acquired by Swedish Research Libraries

Printed texts have at least until recently been the main way of documentation and diffusion of scholarly ideas, and until, say, the middle of the 20th Century books were more important than articles. Thus, bibliometric measures may shed some light on the process of diffusion.¹⁴ We first scrutinize the acquisitions of foreign books on economics by Swedish university libraries (including a few other libraries). This is possible due to a common acquisition register for foreign books, created in the 1880s (one of the comparative advantages, mentioned in the introduction).

Table 1 Acquisitions of Swedish university libraries (country of publication, per cent)

Year	Germany	Austria	UK	USA	France	Scandinavia	Other	Total
1886-87	53	7	7	2	19	7	6	100
1894-97	52	4	12	4	14	4	10	100
1903-07	48	2	15	8	15	7	5	100
1914-17	49	2	13	9	8	10	9	100
1924-27	36	2	20	16	5	9	13	100
1934-37	24	2	26	24	10	7	6	100
1944-47	4	0	22	39	11	11	13	100
1954-55	15	2	15	32	10	5	21	100

Table 1 shows that at the end of the 19th Century more than half of the foreign books were published in Germany, and almost the same level was maintained until the First World War.¹⁵ In the 1920s, Germany's share was clearly reduced and balanced by the Anglo-Saxon share. After that, Germany's share is considerably less.

¹⁴ This section builds mainly on Sandelin (2001).

¹⁵ For each year, or sometimes for a two-year period, each foreign book acquired during the period is registered, together with the libraries that have acquired it. If a book has been

The extremely low German share in 1944-47 is a result of the Second World War. During and after the war, it was physically difficult to produce books in Germany. Moreover, many distinguished authors had been forced into exile, as documented by Hagemann and Krohn (1999). Austria's share may appear surprisingly low, taking into consideration its eminent economists – such as Menger, Böhm-Bawerk and Wieser – around the turn of the century. It is possible that Austria's share would have been greater if we had counted the frequency of lending, instead. However, this is not possible, so in our tables an important book that is often borrowed gets the same weight as a rarely read book. Besides, the country where a book is published is not necessarily the same as the country where the author lives. For instance, while the second edition of Böhm-Bawerk's *Geschichte und Kritik der Kapitalzinstheorien* was published in Austria (Innsbruck), the fourth edition was published in Germany (Jena). The mirror image of the German decline is the Anglo-Saxon rise, which means that the aggregate share of the UK and the USA increased from 9 per cent (less than the French share) in 1886-1887 to 50 per cent in 1934-1937.

2.4 *Doctoral Theses*

Doctoral theses in economics are an important source for those who look for evidence of influences on the discipline. This is especially true for early periods when the thesis was often a large and broad *opus* that in many cases remained the author's main scientific contribution throughout his career. The language of a thesis may indicate where the author hopes to find readers, but is reasonably also correlated with the author's own reading. It may also manifest social or scientific ambitions; the author may be inclined to write in the same language as admired precursors.

acquired by several libraries in the same period, or by one library in multiple copies, it still counts as one book in *Table 1*.

Figure 1. Language of doctoral theses in economics

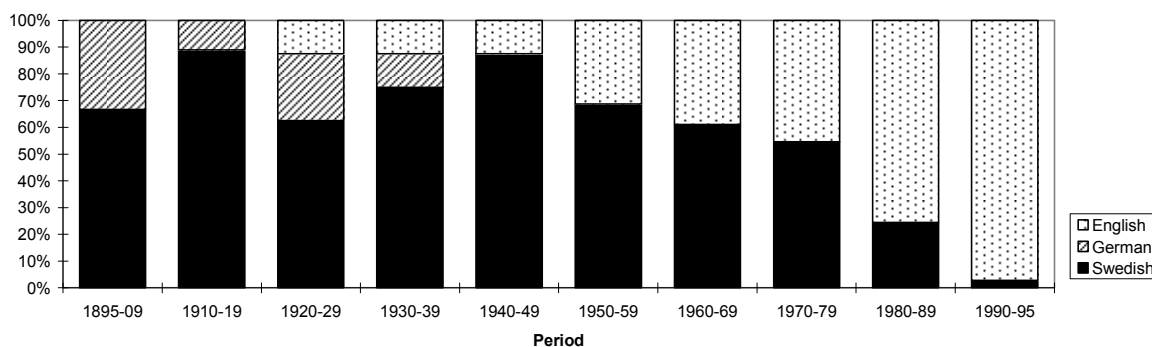


Figure 1 shows in which language Swedish doctoral theses in economics presented during the period 1895-1995 were written. Until the 1920s, these were written either in Swedish or in German. The first thesis in English was Karin Kock's *A Study of Interest Rates* (Stockholm 1929) whose choice of language was largely motivated by the dissertation's focus on the English money market. The last, or at least the latest, thesis in German is Tord Palander's *Beiträge zur Standortstheorie* (Uppsala 1935), which reflected the German origin of most of the pioneering contributions in location theory.¹⁶ Three of the fourteen chapters are devoted to the ideas of three individual authors, and all of them are Germans: "J. H. von Thünen und seine Schule", "Launhardt's Analyse der Transportkosten" and "Alfred Webers Standortstheorie". In the extensive bibliography German-language works are predominant (53 %) with English-language titles on the second place (42 %). Besides the following shift from German to English, we notice that Swedish remained the predominant language until the 1970s. Even in the 1960s, 11 out of 18 theses were in Swedish. The dominance of English over Swedish developed first in the 1980s, and in 1990-95 only three per cent of the theses were in Swedish.¹⁷

¹⁶ Among the theses written in German was Erik Lindahl's influential *Die Gerechtigkeit der Besteuerung* (Lund 1919) and Margit Cassel's *Die Gemeinwirtschaft oder Die Gründe einer öffentlichen Haushaltung* (1924), which was appreciated by Wilhelm Röpke (Gustafsson and Hagemann (2008). Margit Cassel, who was Gustav Cassel's daughter, was the first woman to take a doctoral degree in economics in Sweden. Otto Steiger's *Studien zur Entstehung der neuen Wirtschaftslehre in Schweden* (Uppsala 1971) was formally a thesis in economic history.

¹⁷ Detailed figures for the most recent decades are given in Sandelin & Ranki (1997). More information about doctoral theses can be found in Sandelin & Veiderpass (1997).

Table 2 Countries of origin of publications cited in Swedish doctoral theses in Economics (per cent)

Year	Sweden	Germany	UK	USA	Scandinavia	Other	Total
1895-1909	38	28	14	9	4	9	100
1910-19	43	18	13	6	3	16	100
1920-29	17	31	23	18	3	9	100
1930-39	11	41	12	26	1	10	100
1940-49	72	2	6	17	2	1	100
1950-59	50	2	19	19	4	5	100
1990-95	9	2	24	45	1	20	100

Which sources have authors of doctoral theses used? *Table 2* shows in which countries publications that are cited in doctoral theses during 1895-1959 were published. For comparison, the figures for 1990-95 are shown, too.¹⁸ First, we notice that Sweden's share has not declined continuously, even though an investigation of the post-war period alone would have given that impression. The proportion of Swedish references was low in the 1920s and 1930s.

Eight theses were presented in the 1920s, and among the authors we find Gunnar Myrdal, Bertil Ohlin, Gustaf Åkerman, Margit Cassel and Karin Koch, all of whom had less than 12 per cent Swedish references. The reason is that their theses had a theoretical character with no or few explicit references to Swedish reality. In the 1930s, too, eight doctoral theses were presented. The eminent Stockholm School economists Tord Palander (whose thesis, however, belongs to location theory, outside the fields of the Stockholm School), Alf Johansson, Erik Lundberg, and Ingvar Svennilson were all well-read in the international literature, which resulted in many references. Palander especially was rather independent of domestic sources; only two per cent of the publications he cites were published in Sweden. For the 1940s and 1950s, on the contrary, the Swedish shares are very high. During this

¹⁸ "Year" refers to the date of presentation of the thesis. For 1895-1949, 38 out of 39 theses are included, for 1950-59 a sample of 11 out of 16, and for 1990-95 a sample of 11 out of 125 theses. If a thesis lacks a list of references, the references have been collected from the footnotes. When the percentages have been calculated for a certain period, the publications cited in all the theses of that period are pooled. In the pooled list, which makes up the basis for the percentages for each period, a given publication is reckoned more than once if it is included in more than one thesis during that period.

period, a number of theses with heavy empirical content relating to the Swedish economy were presented. In some cases this meant that more than 80 per cent of the references were Swedish.¹⁹

We do not find a continuously diminishing German share in *Table 2*, but a drastic decline in the 1940s. In part, the absence of an uninterrupted decline is a consequence of the sharp fluctuation in the Swedish share (the total necessarily adding up to 100). The fact that less than ten theses were presented during each decade before the 1950s contributed to the fluctuations, as each single thesis acquired a high weight. If we focus our attention on the relation between the shares of Germany and the USA (dividing Germany's share by the US share), we find, however, that the relation declined continuously, even if by leaps.²⁰ The first leap came in the 1920s (from 3.0 to 1.7), and the second (from 1.6 to 0.1) in the 1940, which is comparable to the relative developments of the acquisitions listed in *Table 1*.

In all this we have neglected that the country of publication is not always the country where the author lives and works. This is obvious for the present, but the phenomenon existed to some extent in earlier times, too. For instance, Wicksell published books in Germany, and Cassel in Britain and Germany. Some indication, even if biased, of the degree to which the country of publication diverges from the country of the author's employment may be found in the following way: With regard to about 25 per cent of the references the cited author is included in Mark Blaug's *Who's Who in Economics* (1986). In these cases, which are evidently restricted to fairly "well-known" economists, we utilize the information about the author's employment given by the *Who's Who*. For this "sample of the sample" of references in Swedish dissertations during the period 1895-1924 we find:

Germany is cited author's country of employment	17 %
Other country is cited author's country of employment	83 %

The country of publication of the citation is the following:

The cited work is published in Germany	26 %
--	------

¹⁹ This is true at least of Torsten Gårdlund's thesis about the industrial society, Anders Östlind's about the Swedish economy 1914-22, Lars Lemne's about future agricultural policy, Ingemar Gerhard's about Sweden's foreign trade, Jan Wallander's about flight from the forests, and Erik Ambjörn's about Sweden's dependence on imports.

²⁰ The figures for the periods listed in *Table 2* are: 3.1, 3.0, 1.7, 1.6, 0.1, 0.1, 0.04. If both the USA and the UK are included in the denominator, the inter-war decline is less drastic: 1.2, 0.9, 0.8, 1.1, 0.1, 0.1, 0.03.

The cited work is published in other country 74 %

The difference between 26 and 17 per cent indicates that there was a net inflow to Germany of manuscripts that became published and cited in Swedish doctoral theses. In reality, the net flow almost coincided with the gross flow (i.e., German authors published hardly anything in other countries), and about half of it consists of works by Swedish authors (Wicksell and Cassel) that were published in Germany. For the period 1927-1949, Germany's significance has diminished, but otherwise the pattern is similar:

Germany is cited author's country of employment 11 %

Other country is cited author's country of employment 89 %

The country of publication of the citation is:

The cited work is published in Germany 19 %

The cited work is published in other country 81 %

Here, too, a larger share of cited works are published in Germany (19 %) than the German share as country of employment of the cited authors (11%).²¹

2.5 *Why did the German influence decrease?*

Our examination of leading economists, acquisitions by libraries and different measures connected with doctoral theses indicates, as expected, that the German influence on the discipline of economics in Sweden decreased markedly after the initial decades of the 20th Century. No single factor is likely to explain the whole picture which incidentally may look similar for other disciplines. The evolution should be seen as a consequence of many concurrent factors.

The First World War evidently diminished the influence of German economists. Not only did direct contacts between Sweden and Germany become more difficult to maintain during the war. More importantly, Germany lost prestige. "[T]he First World War, political developments in Germany between the wars, and later the Second World War as well, all probably discouraged many business students from visiting Germany," Engwall (1992: 154) concludes in an analysis of business administration, and the same is probably true of economics.

Another factor that has been suggested, perhaps not completely convincingly, is a continuing influence of the Historical School in Germany, long after it had lost its

²¹ A more detailed account of different combinations of country of publication and country of employment is found in Sandelin (2001).

position in other countries. Thus Henry Spiegel (1997) insists with some emphasis that German economists persisted in adhering to the Historical School to the extent that it hindered the development of the discipline in Germany and resulted in a loss of influence on German economists. The Historical School “ruled virtually unchallenged in Germany until World War II,” according to Spiegel. Furthermore, “it is possible that the ghost of historical economics is still alive and has clipped the wings of German economists in the postwar world. Neither a German exile nor a German economist at home has been crowned with a Nobel Prize, a situation quite unlike that in other fields of cultural endeavour with Nobel awards.”²²

We can make at least two comments. First, it is obvious – and has been documented above – that the introducers of modern economics in Sweden were not very impressed by the Historical School; among the professors only Steffen was influenced by it to a significant extent. Second, other interpreters are of the opinion that as early as “[w]ith the end of the First World War the Historical School lost its dominant paradigmatic position in German economics” (Hagemann 1998). The same idea is expressed by Janssen (1998: 12) who claims that, by the 1920s, the classical-neoclassical tradition had by and large driven Historicism and Romanticism from their dominant positions.

The rule of the Nazis and the Second World War are obviously more relevant factors. Many economists were expelled from the universities or found the situation untenable and left the country, which not only weakened the discipline in Germany after 1933 and in Austria after 1938, but also strengthened it in the country of refuge (Hagemann and Crohn 1999). The remaining content of economics in both countries was not independent of NSDAP policy. Janssen (1998: 13) argues that classical and neoclassical thought was hit harder than the Historical School by emigration, and representatives of the Historical School were favoured when new leading posts were filled. The political oppression in the 1930s and 1940s was no doubt a very important factor behind the decline of German influence. However, it does not provide a complete explanation. We have seen that the decline began earlier according to some indicators, such as acquisitions of foreign books and the language of doctoral theses. Besides, German emigrants hardly played an important role for Swedish economists either before or after emigration. We may observe (even if the number of references

²² This was evidently written before Reinhard Selten was awarded the Nobel Prize in economics in 1994.

as a measure of influence is not immune to objection) that only a few per cent, or less, of the works cited in Swedish doctoral theses were written by emigrants listed by Hagemann and Krohn (1992).²³ In sum, we may say that Nazism and the Second World War substantially intensified a process that in some respects had started earlier.

The fourth factor behind the decline on German influence on Swedish economic thought is the diminishing significance of geographical distance. It may be trivial to remark that transport services have improved continuously since the 19th Century. Now it is not much more difficult to move from Sweden to a university in the USA than to one in Germany. In addition, communication without travelling has become more efficient. One of Germany's advantages for Swedish scholars – the comparatively short time distance from Sweden – has consequently become less important. In saying this, we should, as a certain reservation, recall that even in earlier times, distance did not hinder a stream of influence from Germany to the USA at the end of the 19th Century. For the Americans, the German Historical School represented a new way of thinking that appealed to American students, who challenged traditional classical-style thinking. The original statement of principles of the American Economic Association expresses ideas which are found in the Historical School (Dorfman 1955).

Finally, the fifth factor is linked to the growth of American population and research. Germany's role was eventually taken over by the USA. The measures we have used – percentages of different magnitudes – give the degree of influence the character of a zero sum game: If somebody's share increases, somebody else's must decrease. The USA is a young and large nation whose population more than doubled between 1880 and 1930, while Germany's population increased by about half as much (after correction for the cession of territory). Furthermore, German universities were forerunners as research universities; in the USA the successful German university model was imitated only at the end of the 19th Century.²⁴ The discipline

²³ The percentages for German emigrants are, for different periods: 1910-19 = 1.2, 1920-29 = 2.7, 1930-39 = 3.7, 1940-49 = 0.1, 1950-59 = 2.5. ("Period" refers to the period when the theses were presented.) The corresponding numbers for Austrian emigrants are: 0.1, 0.0, 1.2, 0.1 and 1.6. The theses scrutinized are the same as in *Table 2*.

²⁴ The University of Berlin, founded in 1810 and characterized by teachers who were expected to teach *and* to do research and lead seminars, provided a model outside Germany, too. "In 1876, the Johns Hopkins University was founded in Baltimore as the

of economics in the USA was, according to Schumpeter (1954: 864) “starting from near zero at 1870”, but developed rapidly. Thus, the faster population growth in the USA contributed to a faster growth in the number of scholars in the USA than in Germany. An additional effect, a catching-up effect, probably came from the expansion of research universities in the USA during a period when such universities had long been normal in Germany.

3 The Swedish Influence on Economics in the German Language Area

3.1 Wicksell and the Austrians

Probably the most prominent example of mutual influences of economists in the German and Swedish language areas is the Austro-Swedish interchange between Böhm-Bawerk, Wicksell, Mises, Hayek, Myrdal, Ohlin and Lundberg. The influence of Böhm-Bawerk on Wicksell has already been pointed out in the previous section. It should be noted, however, that it would be an exaggeration to argue that Wicksell developed his famous inflation theory – as proposed in *Interest and Prices (Geldzins und Güterpreise, 1898)* – from Böhm-Bawerk’s theory of capital and interest. The essential elements of Wicksell’s inflation theory, in particular the link between interest-rate gaps and changes in the price level, are all present in a manuscript written around 1889. There Wicksell based his benchmark concept of a “natural rate of interest” on classical concepts of a real rate of return and a tendency towards uniform profit rates, rather than on roundaboutness, the agio and stability of capital market equilibrium in real terms (Boianovsky and Trautwein 2001a). In *Interest and Prices* (1898: ch. 9), however, Wicksell related his concept of the natural rate explicitly to Böhm-Bawerk (and Jevons).

Given this Austrian heritage, the publication of *Interest and Prices* in German, marketed by a well-known publisher (Gustav Fischer, Jena), plus the fact that this book is retrospectively regarded as a key contribution to modern monetary macroeconomics,²⁵ it may be surprising that it did not make an immediate impact on

first U.S. institution to embody the German ideal of university education. From that time forward graduate education was an important aspect of many institutions” (Moore 1993).

²⁵ The two representative examples that we invoke for this view are: (a) the influential German textbook of Erich Schneider ([1948] 1963: 434) where it is argued that „the revolutionary coordination of monetary theory and price theory was started by K. Wicksell in his path-breaking work ‘Geldzins und Güterpreise’”, and (b) the new bible of monetary macroeconomists, Michael Woodford’s *Interest and Prices* (2003: chs. 1 and 4) – note the title of that book!

the literature in the German language area or elsewhere outside Sweden. During Wicksell's remaining lifetime it was essentially only Ludwig von Mises, another Austrian and student of Böhm-Bawerk who, in his *Theorie des Geldes und der Umlaufsmittel* ([1912]: 394-96), discussed the substance of Wicksell's monetary theory in some detail.²⁶ Mises criticized Wicksell for being inconsistent in his use of the concept of a pure credit economy when arguing that the cumulative process of inflation would automatically come to an end as the banks would adjust the market rate. Wicksell (1914b) responded with a review in the *Zeitschrift für Volkswirtschaft, Sozialpolitik und Verwaltung*, where he claimed that – under the assumption that “the real capital” would not change during the cumulative process – banks would sooner or later have to adjust interest rates, and that Mises actually had reached the same conclusion without noticing it.

Wicksell's simplifying assumption of unchanged “real capital” (in a theory of *secular* inflation) was problematic. Shortly after Wicksell's death it was abandoned when, in the late 1920s and early 1930s, various approaches to the explanation of “the trade cycle” and, more generally, macroeconomic dynamics came to be based on Wicksell's monetary theory. Even though Wicksell himself had fervently rejected any use of his interest-gap approach for the explanation of business cycles (Boianovsky and Trautwein 2001b), it was obvious that failures of the interest-rate mechanism to coordinate investment and saving plans could provide a powerful analytical handle to analyze fluctuations of both prices *and* production. The “Wicksell Connection” is the term coined by Leijonhufvud (1981) to describe the different approaches in which economists from Vienna, Stockholm and Cambridge (including John Maynard Keynes) have discussed such coordination failures.

A prominent project in the Wicksell Connection was Friedrich August von Hayek's attempt to bridge the gap between general equilibrium theory and business cycle theory by making use of Wicksellian interest-rate gaps. Hayek had come across Wicksell's work in the famous Vienna seminar of Mises. In his habilitation thesis on *Monetary Theory and the Trade Cycle* (1929) and in his LSE lectures on *Prices and Production* (1931), he developed his Austrian business cycle theory, or ABC theory (as Haberler used to call it), “partly upon the foundations laid by Wicksell and partly upon criticism of his doctrine” (1931: 26). In contrast with Wicksell, Hayek stressed

²⁶ Other writers, such as Hahn (1920: n. 110, 121, and 147), confined themselves to making occasional references to Wicksell (1898), without further comments.

that price-level stability would not be a sufficient condition for monetary equilibrium, and that gaps between the equilibrium rate of interest and the actual market rate induce overinvestment and changes in the *structures* of prices and production, rather than in the price level. Hayek insisted that all overinvestment would inevitably be undone by crises that realign the market rate of interest to the rate of time preference.²⁷ Presenting these ideas at the London School of Economics in the middle of the Great Depression, Hayek got into heated controversies with Keynes, Piero Sraffa and others (Kurz 2000).

The LSE/Cambridge controversies about overinvestment *versus* oversaving promoted the diffusion of Wicksell's ideas in the English language area.²⁸ The Stockholm School came to use it as a benchmark contrast for the development of macroeconomic dynamics (of which more below). But Hayek's ABC theory was not the only work in the German language area based on Wicksell's ideas about interest rates and price levels. Prior to Hayek (1929), Hans Neisser of the University of Kiel had presented his habilitation thesis on the value of money, *Der Tauschwert des Geldes* (1928). Neisser blended the approaches of Irving Fisher, Wicksell and classical economists in such a masterly fashion that, when Keynes in his *Treatise on Money* (1930: 178) noted the similarity of his own approach to that of what he perceived as the "neo-Wicksell School" of Mises, Hayek and Neisser, he added in a rare bout of humility: "I find Dr. Neisser's general attitude to monetary problems particularly sympathetic, and am hopeful that he may feel the same about my work". Neisser did not, however, belong to the same school as Mises and Hayek.²⁹ While Hayek (1929) quoted Neisser (1928) frequently and approvingly, Neisser (1934) was very critical of Hayek's ABC theory. Like Wicksell (1898), but in contrast to Mises, Hayek and the other writers in Leijonhufvud's Wicksell Connection (Dennis Robertson, Keynes, Lindahl, Myrdal and Ohlin), Neisser did not discard the quantity theory of money,

²⁷ See Trautwein (1996) for the problems underlying the neutrality postulates in Wicksell's and Hayek's theories about monetary equilibrium.

²⁸ The English translation of Wicksell's *Geldzins und Güterpreise* had been commissioned by the Royal Economic Society in the late 1920s, but was not completed until 1936. Nevertheless, the controversy also aroused interest in translations of Wicksell's *Föreläsningar*, the *Lectures on Political Economy*, that were published in 1935, as well as of other writings of Wicksell. The controversy also made a lasting impression on younger economists, such as John Hicks and Nicholas Kaldor; cf. Hicks (1967), Shehadi (1991).

²⁹ For a systematic survey of German monetary theory in this era see Ellis (1934).

but sought to adapt it to modern economies with bank-based financial systems. His explanation of the business cycle phenomenon, too, was closer to the approach of Wicksell (1907) in that he related both cycles and growth to irregular technical progress and its interaction with capital accumulation (Trautwein 2003).

3.2 Cassel's Catalytic Textbook

In the interwar years, but even later, Cassel's *Theoretische Sozialökonomie* (1918) had a significant influence as a text that was widely used in Germany (Helmstädter 1976: 34) and other countries – though not in Sweden, where Cassel had met devastating critique from Wicksell, Davidson, and Heckscher.³⁰ The influence of the *Theory of Social Economy* on economic studies in Germany is reflected in the great number of citations in other textbooks and in surveys where Cassel was quoted as one of the greatest authorities of his time.³¹ This impression was certainly supported by the fact that Cassel, in the 1920s, was one of the leading experts on monetary and exchange-rate policies who pleaded for a return to the gold standard under purchasing power parity, but also for reducing Germany's postwar-burden of reparation payments. Voicing strong opinions on these issues at international political summits and in countless lecturing campaigns and articles made him especially popular in Germany.

Cassel's *Sozialökonomie* was not only the leading textbook in the interwar period. It also provided a benchmark, if not an impulse for theoretical advances in the German language area. One of the fields in which it catalyzed progress was Walrasian general equilibrium theory, the other was business cycle theory.

Even though Cassel (1918) “forgot” to refer to Walras (see above), he did Walras the great service of bringing his general equilibrium model of supply and demand in a closed stationary economy back into debate, in a strongly simplified version and extended by a model of a uniformly progressing economy (Cassel 1918:

³⁰ In his unusually harsh review Wicksell (1919) chided Cassel for reproducing Walras's system without referring to him in as much as a single footnote (see also above, section 2.1). The review, which is also full of other, more substantial criticism, was published in *Ekonomisk Tidskrift* in 1919, in a German translation in *Schmollers Jahrbuch* in 1928, and as an appendix to the English translation of volume 1 of Wicksell's *Lectures* in 1934. This alone reflects some international interest in Cassel. For the relationships among the grand old men of Swedish economics see also Henriksson (1991b) and Persson (1998).

³¹ Examples are the indexes and relevant passages in Bülow (1931), Weber (1933), and Ellis (1934). More detailed evidence will be provided below, in section 3.4.

chs. 1 and 4). Cassel claimed to have proved the existence of a unique general equilibrium by constructing a system of simultaneous equations in which the number of unknowns is equal to the number of equations. This claim was critically reexamined by Neisser (1932), the Dane Frederik Zeuthen (1932, 1934), and Heinrich von Stackelberg (1933), who – in this order – showed that completeness is not a sufficient criterion for a solution that makes economic sense (including positive factor prices), that the system ought to be written as inequalities, and that it could under certain conditions be overdetermined. These problems provoked discussions of the “Walras-Cassel model” (as it was called later) in Karl Menger’s Mathematical Colloquium at Vienna and led, in 1935/36 to Abraham Wald’s path-breaking proof of the existence of a unique equilibrium in a stationary Walras-Cassel economy, which in turn prepared the ground for the Arrow-Debreu standard model of Walrasian general equilibrium theory.³²

The other area in which Cassel may be seen as having provided an impulse for theoretical progress is business-cycle theory. In the 1920s and 1930s, the German language area saw lively debates about the compatibility of general equilibrium theory with a general explanation of the phenomenon of industrial fluctuations, in which Adolf Löwe (later: Adolph Lowe), Joseph Alois Schumpeter, Hayek, and Friedrich Lutz were among the main protagonists in the different camps (Rühl 1994). Cassel (1918) was not only the representative target of attack in terms of general equilibrium theory. Together with Arthur Spiethoff and referring to *Sozialökonomie* (1918) and earlier writings, Cassel was also considered as the most prominent proponent of a nonmonetary overinvestment theory (Haberler 1964: 72-85).³³ A most interesting discussion of Cassel’s approach(es) can be found in the habilitation thesis of Lutz, *Das Konjunkturproblem in der Nationalökonomie* (1932), where Cassel is extensively criticized for not consistently sticking to general equilibrium theory as a tool to explain cyclical fluctuations, but taking recourse to more popular mixes of pure theory and stylized facts (*Mischtheorie*). Lutz himself was of the opinion that

³² For Neisser’s contribution see Hagemann (1990); for a history of the Vienna Colloquium see Menger (1994), and for a comparative discussion of the static Walras-Cassel model and the von Neumann growth model, which also grew out of the Vienna Colloquium discussions about Cassel’s system see Kurz and Salvadori (1995: 407-14).

³³ In later editions of *Sozialökonomie* and in numerous other writings after the mid-1920s Cassel switched to a monetary theory of the business cycles in quantity-theoretical terms.

industrial fluctuations could all be explained within the confines of general equilibrium theory, since they either represent exogenous changes in the data or parts of the endogenous reaction of the system to the latter – a view that bears some resemblance to the use of Ragnar Frisch’s “impulse-propagation” terminology in modern RBC theory.

3.3 *Stockholm School Connections*

Most of the modern Swedish economists in the second generation (see section 2.2) were members of the so-called “Stockholm School” – a group that comprised (ordered by age) Karin Kock, Erik Lindahl, Gunnar Myrdal, Bertil Ohlin, Alf Johansson, Dag Hammarskjöld, Erik Lundberg and Ingvar Svennilson. The Stockholm School can largely be characterized by a common research agenda that set the focus on macroeconomic dynamic processes, based on microeconomic foundations of the formation of expectations and coordination of plans (Ohlin 1937, Jonung 1991). The Stockholm School worked mostly along the lines of Wicksell and Fisher, conditioned by the approach of Myrdal who, in his doctoral dissertation of 1927 about price formation and change, “set out to give Cassel’s static theory based on Walrasian general equilibrium a dynamic form by introducing uncertainty, risk, and anticipations and discussing intertemporal planning under uncertainty” (Jonung 1991: 12-13).

As mentioned in section 2.2, this second generation was hardly influenced by the German literature of its time. Nevertheless, there was some interaction between them and economists from the German language area. One of the most interesting chapters of that story ended in 1974, when Myrdal and Hayek were jointly awarded the Nobel Prize in Economics. Probably neither of the two was very happy about the respective co-laureate, as their views conflicted in almost every respect of political economy and philosophy. And yet, it was Hayek who had helped Myrdal to acquire international fame at an early stage in his career. In 1931, when Hayek worked on editing a German edition of extra-German contributions to monetary theory (Hayek 1933), he first asked Erik Lindahl to contribute a paper on the theory of monetary policy (Shehadi 1991: 382). Lindahl had no time and referred Hayek to Myrdal, who had just written a long essay on Wicksell’s concept of monetary equilibrium for *Ekonomisk Tidskrift* (Myrdal 1931), even though that essay contained a rather harsh critique of Lindahl’s own positions. In the German version commissioned by Hayek, Myrdal toned down his criticism of Lindahl, and attacked instead the theoretical

tenets and policy conclusions that Hayek had earned a name for. Hayek nevertheless included Myrdal's article in the omnibus volume – be it as a matter of personal integrity or simply due to time pressure. But a few years later he took a sort of revenge by refusing to allow Myrdal to give a lecture at the London School of Economics and by making life difficult for younger LSE economists – such as Hicks, Kaldor, George Shackle and Brinley Thomas – who dared to show some interest in non-Austrian Swedish economics.³⁴

Another interesting facet of Myrdal's contribution to Hayek's omnibus volume was his cooperation with Gerhard Mackenroth, whom he had met during his numerous visits to Kiel in the mid-1920s and who had spent some time as Rockefeller fellow with Myrdal at Stockholm University (then Stockholms högskola) in the late 1920s (Andersson 2001). Mackenroth translated Myrdal's essay about *Monetary Equilibrium* into German, and it seems that the dual term of *ex ante* and *ex post*, which later became a trademark for the Stockholm School (Ohlin 1937) in its discussion of the discrepancies between expected and realized outcomes in market processes, was coined in the correspondence between Myrdal and Mackenroth. In 1933, Mackenroth joined the NSDAP and in 1934 he became extraordinary professor at the Kiel Institute of World Economics from where Neisser and others had been expelled by the Nazis. In the summer of 1933, Myrdal and his wife Alva visited the Kiel Institute on behalf of the Rockefeller Foundation, to which they reported very critically about the situation in Germany (Hagemann 2005). A few months earlier, the day after Hitler had seized power, Myrdal had written a very critical foreword for a Swedish translation of Mackenroth's book about "Germany's youth in revolt" (Myrdal 1998: 380-83), in which he warned of the consequences of hate-filled nationalism that Nazi rule would have. Myrdal was also very active in helping emigrants from Germany to find asylum and work in Sweden. All this brought the friendship between Myrdal and Mackenroth to an end, but they "reconnected after

³⁴ Thomas (1991: 390) describes, with some irony (but perhaps also, as Leijonhufvud suspects, "overstating things a bit for effect"), the atmosphere at the LSE in the 1930s: "The ruling powers [Robbins and Hayek] were passionate believers in freedom, and this included freedom to adjust the constraints within which freedom was exercised by the nonfavorites. The main type of adjustment was the postponement of tenure." In 1946, Hayek even saw to that Kaldor was refused leave of absence to join the Economic Commission for Europe and work under the direction of Myrdal (Shehadi 1991: 383).

the war when Mackenroth needed support in the starvation years 1945-49" (Eliäson 2000: 333).

As mentioned in section 3.1, there was also a further round in the Austro-Swedish interaction, in the sense that some writers in the Stockholm School used the contrasts between Hayek's "overinvestment" (or rather "malinvestment) approach and Keynes's "oversaving" approach as a heuristic device to organize their discussion. This was, for example, the case in Ohlin's 1932 article on "the unsolved problems of the present crisis", a paper originally given as Newmarch lecture at the University of London, but translated into German by Neisser and published in the Kiel Institute's journal, *Weltwirtschaftliches Archiv*. Ohlin clearly leaned more to the Cambridge side, but made a number of important qualifications from the point of view of a small open economy. The other, even more relevant example is Lundberg's doctoral dissertation, *Studies in the Theory of Economic Expansion* (1937), where a number of different model sequences are constructed to show that the approaches of Keynes and Hayek could be accommodated as special cases within the same dynamic framework.

3.4 *The Diffusion of Swedish Economics through German Textbooks*

In terms of academic communities the German language area is much larger than its Swedish counterpart. In addition to the asymmetry in size, the greater heterogeneity of the universities in Germany, Austria and Switzerland make it considerably more difficult to repeat the bibliometric exercises of sections 2.3-4 for the converse case of Swedish influences on economics in the German language area. Thus we will have to make do with some simpler measure. We have chosen to check the indexes and reading lists in German textbooks between the 1930s and the 1960s for references to the most prominent Swedish economists of the early 20th Century, whom we have identified in the previous sections.

Our quick and incomplete survey of pre- and early post-war German textbooks gives the following rough results:³⁵ In the pre- and war textbooks (until

³⁵ For lack of time (to write this preliminary version), we have limited our sample to the findings that we made on the shelves of the library of a relatively young and underequipped university in Northern Germany, where economic studies were introduced only in the 1970s. The collection of earlier textbooks can thus hardly be expected to be representative or even complete. Suggestions of relevant titles (i.e., with

1945), we find numerous citations of Cassel, in several cases among the top scores, and a few citations of Wicksell (Bülow 1931, Weber 1933, Eucken 1940, Carell 1941, von Stackelberg 1943). In the early post-war textbooks, the number of citations of Wicksell is rising, and various writers of the Stockholm School – especially Ohlin, Lindahl, Myrdal and Lundberg (the lag!) – as well as Palander and Åkerman begin to receive some attention (Schneider 1947-62, von Stackelberg 1951, Meinhold 1954, Bülow 1957, Weber 1957). This pattern is especially clear in the books published by the same author both before and after the end of the war, such as Bülow, Weber and Eucken. Surprisingly, Cassel even gains more space and citations in the post-war editions of Bülow and Weber (even though Keynes is clearly the “shooting star”, but rather in the negative).

The strongest impulse for the diffusion of Swedish economics through German textbooks was clearly given by Erich Schneider (1900-70). While in most of the other aforementioned textbooks Swedish authors were, apart from Cassel, among the “also ran” of an international mix, Schneider’s books showed a strong Scandinavian influence. He had indeed strong connections with Scandinavian economists through his formative years at Aarhus University (1936-46) and his later work at the University of Kiel (Schäfer 1999, Häuser 2003). His four-volume *Einführung in die Wirtschaftstheorie* (1947-62) became the standard textbook in West German economics after the war, often characterized as the text that brought Keynes to Germany.³⁶ From the references, quotations and citations it is obvious that Schneider also helped to bring Wicksell and the Stockholm School to Germany. In volume I of his *Einführung* (1947), a very influential treatise of the circular flow of income and expenditure and the system of national accounting, Schneider refers to Cassel, but more frequently and essentially to Lindahl. In volume II (1948), the microeconomics part, Wicksell comes fourth in the citation scores (after Schneider himself, Cournot and Zeuthen), receiving great praise in various places, but especially for having paved the way for a “coordination of monetary and price

references to Swedish economists) that currently are missing from our survey will be greatly appreciated!

³⁶ As Häuser (2003) shows, Schneider’s *Einführung* was a great success also because of its high standards of analytical rigour. Until the early 1960s, at least, it was also used as a standard textbook in many other countries, mostly in translations into the local languages. As Axel Leijonhufvud (in personal correspondence with HMT) remembers from his own studies, vol. II was also used in its German version at Swedish universities.

theory" (Schneider 1963: 434). In volume III (1952), the macroeconomics part, Wicksell moves up to the third position after Keynes and Haberler (leaving Schneider behind), and members of the Stockholm School, plus the Uppsala economists Palander and Bent Hansen, are frequently cited (though, strangely, not Myrdal). In volume IV, the first part of the history of economic thought with a focus on microeconomic theories, ending with Marshall, Wicksell is frequently made to play the role of an illustrating and clarifying co-commentator on the developments before his time. His own works, as well as those of Cassel and the Stockholm School would certainly have received a thorough treatment, if Schneider had managed to write volume V, the macroeconomic part of the history of economic thought.

In the 1960s and after, the references to Wicksell and the Stockholm School began to vanish from the economics textbooks published in Germany, as the ideas of the Stockholm School were incorporated in the mainstream of Keynesian economics, Ohlin's (1937) and Lindahl's (1950) critiques of Keynes's *General Theory* (1936) notwithstanding. With the codification of macroeconomics in terms of IS/LM+AS, the diffusion of Swedish economics had turned into dilution.³⁷

4 Conclusion

To the exhausted reader, our survey of German-Swedish interchange of economic ideas may look like a full *tour d' horizon*. Yet it should be noted that, due to constraints of time, space and competence, we have covered only few fields in our selection of mutual influences. There was significant interaction in other fields as well. A prominent example is location theory, where the contributions of Johann Heinrich von Thünen, Alfred Weber, August Lösch and Walter Christaller had a formative influence on economists elsewhere, among them Palander (1935), who in turn helped to clarify and generalize concepts of spatial economic analysis. Another case certainly worth exploring is the background and the *Wirkungsgeschichte* of Lindahl's (1919) model of fair taxation.

All in all, the interchange between economists in the German and Swedish language areas was quite lively, and certainly also affected by communication with economists from other language areas than could be reported here. Its decline may partly be explained by some idiosyncratic factors, such as the isolation of German

³⁷ As that third-generation Swede Leijonhufvud (1968, 1981) has argued, Keynes's original theory suffered a similar fate.

economics by the emigration (outer and inner) of top researchers after 1933. But it is largely due to the globalization of the economic discipline in the inter-war and post-war periods. The concomitant network externalities of the English language have affected the exchanges of ideas between these and other language areas. Even this paper is written in English, since most of the few interested readers it might have in Sweden and elsewhere would no longer be able or willing to read it in German. As the global marketplaces for economic ideas have moved into the domain of the English language, the German-Swedish exchanges have suffered a fate similar to that of the region's shipping trade. The latter, however, managed to leave a clear trace by making *Baltic Exchange* a global brand name.

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