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Wartime and Post-war Economies (The Netherlands)

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Mutual dependence between the Dutch economy and Western German industrial centres precluded hostile German actions against the Netherlands. Indeed, German war planners hoped to use the Netherlands as a supply-line for the Central Powers. The Allied blockade made this possible only to a point. The blockade, and changing patterns of global production and consumption, cut off the Dutch from world markets. This undermined the Dutch ability to import much-needed supplies, but also protected Dutch industries from foreign competition and forced them to solve the supply problems by import substitution and reorganisation.

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Introduction

At least until 1940, when German troops attacked Western Europe once again, Berlin's 1914 decision to ignore Belgium's neutrality and honour that of its similarly small northern neighbour, had massive consequences for both countries.[1] In Belgium it is generally believed that the Netherlands profited from the war, while many Dutch are barely aware of the impact of the First World War.[2] Indeed, the Dutch economy did benefit from the war.

Nonetheless, during the last years of the conflict, Wilhelmina, Queen of the Netherlands (1880-1962) often had to rush along a crowd of protesters crying out, "Hunger, Hunger!"[3] The topic of this paper is Dutch wartime economic development and its consequences. It questions how the Netherlands, whose economy was more open than any other, improved its position.

Dutch Openness and Dependency

By 1885, the 19th century's canalization of the Rhine was almost complete. Over the next thirty years, the scale of steam-tugged trains of barges increased constantly. Consequently, freight rates dropped 80 percent while rail tariffs remained stable.[4] This suited perfectly the increasing demand for transport in the industrial heart of Western Europe, the Ruhr. There, just across the border from the Netherlands, technical developments demanded ever more ore, coal, and foodstuffs. As transport via Rhine barges was the cheapest option, the port at the Rhine estuary, Rotterdam, became essential for German industry. In the years before 1914, almost a quarter of all German trade crossed the German-Dutch border via the Rhine and a statistically significant relationship developed between barge compared with rail tariffs and the Rhine's share in total transport. The same is true for Rhine transport and transhipment in Rotterdam.[5]

Dependence was strengthened as almost all coal used in the Netherlands came from Germany. The Ruhr Coal Cartel (RWKS) had a 75 percent share of the Dutch market and Dutch coal had only 5 percent, but around 1910, its share started to grow. Hence, the RWKS threatened Dutch wholesalers that they would cut off their supply of German coal if they also sold Dutch coal.[6] The wholesalers gave into the demand, but a Rotterdam newspaper presciently warned that in times of crisis Germany would cease to export its coal to the Netherlands.[7] Hundreds of similar cartels existed in other branches of German industry.[8] Their position on the Dutch markets is unclear, but since most basic industries in Germany were organized into cartels, and the Dutch were dependent on the German supplies for such products, it was probably substantial.[9] Outsiders were repelled by these cartels if they tried to conquer a part of their markets.[10]

From the 1860s, when both countries became free traders, the Dutch economy became extremely open, with an export quote (exports divided by GDP) of over 0.5.[11] In 1862 and 1875, 23 percent of these exports went to Germany; 47 percent in 1910. Between 1862 and 1875 the export quote rose from 0.43 to 0.62 and then stabilized; exports to Germany increased from 10 percent of the GDP in 1862 and 14 percent in 1875 to 30 percent in 1910. Imports show a similar trend. In 1862, 14 percent came from the *Zollverein*; in 1875 and 1910 22 and 42 percent came from the *Kaiserreich* respectively. Imports from Germany increased from 6 to 14 and 30 percent of GDP. In 1912, when the trade ratio (total trade divided by GDP) peaked at 1.4, 0.6 was trade with Germany, much higher than 0.16 in 2012, or 0.49 for the entire EU.[12]

Neutrality

As a substantial part of German trade went through the Netherlands, in 1909, after the Declaration of London was signed, Helmuth von Moltke (1848-1916), Chief of the German General Staff, decided to keep the Dutch out of any European conflict. According to the Declaration, in times of war trade would go on. Neutral ships only had to hand over their cargo if it was explicitly directed to inimical armed forces. As it was allowed neither to block a neutral port, nor to intercept vessels carrying cargo not explicitly sent to inimical forces, Germany could rely on the continuation of Dutch transit. The Act of Mannheim of 1868 assured free Rhine navigation. Therefore, goods reaching Rotterdam could continue on to Germany.

Already in 1909, Moltke wrote that after a German attack on France through Belgium, Britain would use the violation of Belgium's neutrality as an argument to enter a war. Hence, without losing trustworthiness, London could not attack another small country. Therefore, if Germany kept the Netherlands out of the conflict, the Dutch would remain neutral and become Germany's lifeline.[13]

Isolation

From August 1914, the Dutch were confronted with huge economic problems. Around 9 percent of the labour force had been sent to the army, foreign supply was cut off, and financial markets panicked. However, the informal September 1914 Dutch-German agreement on coal supply soon created stability and before the end of 1914 import substitution and governmental orders caused some recovery. Stability continued in 1915, although supply remained a problem as allied attempts to isolate Germany impacted the Dutch.[14] Since the 1930s, economists have thought in terms of national economies. In fact, there was no Dutch economy. A substantial part of Dutch economic activity was adding value to imports that were exported again.[15] When in 1914 the British Commercial Secretary was commissioned "to prevent Dutch supplies from reaching Germany," this threatened transit, and, by isolating Dutch economic activities from its hinterland, broke up the structure of a regional north-western European economy.[16]

A Dutch governmental guarantee that no overseas products would end up in Germany would result in problems with Berlin as it was a breach of neutrality. Private ship-owners and bankers could promise this, however. Thus, the Overseas Trust Company (NOT) became responsible for overseas trade and shipping and acquired a monopoly in these branches.[17] Thus, a crucial part of Dutch foreign policy fell into the hands of private entrepreneurs.[18] It was deemed more important that transit continued, partially because this motivated Berlin's decision to respect Dutch neutrality.[19] Transit never ceased entirely; but, wartime regulation, the blockade, and increasing costs of shipping took their toll on the Dutch economy. Import and export quotes, 0.81 and 0.59 in 1913, decreased to 0.16 and 0.10 respectively in 1918. They only recovered slightly after the war, although the Dutch share in world trade increased.[20] Nonetheless, only in the 21st century have Dutch trade-quotes reached 1913 levels again.[21]

Production

As mentioned above, the NOT's policy meant that industry could continue. According to Van der Bie's statistical reconstruction (see Table 1), however, the economic setback was severe. In 1914 industrial production decreased over 5 percent and stabilized in 1915. Employment also remained low initially, but grew in 1916. According to the Director-General of Labour-Inspection, industry boomed that year: Manufacturing enjoyed an unprecedented prosperity, and it had been many years since such enormous sums of money had been invested in industrial enterprises.[22]

Based on statistical analysis, H.J. de Jong published new data on industrial development in 1999. He argues that by 1916 industrial production grew as high prices, hardly offset by rising costs, resulted in unprecedented profits.[23] Only when Germany introduced the unrestricted submarine warfare in February 1917 and the allies intensified their blockade, did supply collapse. Rising employment indicates that production was higher than suggested in Table 1. Although there is no better data for industry than Van der Bie's or Knibbe's for agriculture, it does not correspond with much more reliable figures on employment.[24] After the 1914 shock, employment recovered until 1916 when it stabilized, making clear that a 1916-1918 fall in production is unlikely. Van der Bie’s explanation, labour hoarding, is unconvincing.[25] His production data is simply too low.

	Agriculture			**Industry**			**Services**			**GDP**			**Total**
	Growth	Added value	Employment	Growth	Added value	Employment	Growth	Added value	Employment	Growth	Added value	Employment	Unemployment in
		1913 = 100			1913 = 100			1913 = 100			1913 = 100		
1913	-1,9	100	100	3,2	100	100	8,2	100	100	5,0	100	100	1,0
1914	12,2	112	99	-5,3	95	97	-2,4	98	99	-1,5	99	98	5,4
1915	-3,2	109	100	-0,3	94	100	-2,5	95	99	-4,5	94	99	6,2
1916	1,4	110	100	-6,3	88	107	2,4	97	103	-1,3	93	104	5,0
1917	7,0	118	98	-20,6	70	107	-8,7	89	108	-9,1	84	105	4,6
1918	-14,8	100	98	-16,4	59	107	2,6	91	111	-4,0	81	106	5,2
1919	-11,4	89	96	31,4	77	107	11,8	102	114	9,1	88	107	5,8
1920	19,4	106	95	19,0	92	115	10,4	113	116	13,4	100	111	4,4

Table 1: Production and unemployment, 1914-1921[26]

Zaalberg and De Jong emphasise adaptation. Moreover, there was non-negligible illegal production. To deal with supply problems and price inflation, national and local governments enacted regulation and price limitation but had neither the means nor experience for enforcement. Poorly-prepared economic regulation and inexperienced supervision results in black markets, as research on World War II shows.[27] Financial data indicate the same. In 1917-1918 money supply (M1) increased faster than price levels, while the GDP decreased.[28] This would be explainable if the government strictly limited trade and prices, which it was unable to do. Thus, the absorption of the increased money supply reflects substantial black markets.

New Production

Cutting off imports generated opportunities. Competition disappeared not just because of the blockade, but also because the belligerents needed their goods at home. Dutch companies thus obtained opportunities to gain better positions in post-war competition. When the economic struggle reached its peak in 1917 nothing was left for non-belligerents. It became clear that the lack of a major coal industry, blast furnaces, adequate food production for home consumption etc. made the country vulnerable. When the 1914 agreement on coal expired in 1917, Berlin blackmailed the Dutch to provide a loan to the *Reich* at 55 guilders per metric ton on top of the base price.[29] Supplies of iron, steel, and foodstuffs were also difficult to obtain. Thus, the government took responsibility or supported private initiatives. Investments in the state mines made the Netherlands almost self-sufficient in terms of coal before the next war. The Hague supported the creation of blast furnaces and initiated the drainage of territories, thus making it possible to feed the nation’s population during World War II.[30] Moreover, government and the business community seized the opportunity to reduce the power of foreign cartels.

The necessity of obtaining raw materials or semi-finished products led to vertical integration – integrating earlier or later steps in the supply-chain. Philips' electronics created its own packaging industry and glassworks, an argon factory, and even a shipping company, all because pre-war contractors could no longer provide supply while demand was booming as foreign competition fell away.[31] Small and medium enterprises also benefitted from the reduction of competition. An increasing share of internal demand had to be covered by Dutch industry. Since companies knew that competition would return, efficiency was essential. Consequently, in addition to expansion, modernization became a target. As foreign engineering works focused on arms production, the Dutch worked on machine building.

The war not only resulted in less competition, but also caused supply problems. To resolve these, the production of raw materials or semi-finished products was often integrated. When a company could not cope, it often cooperated with other companies in the same branch. Therefore, in addition to vertical integration, partnerships resulted in horizontal integration of family firms into new corporations, sometimes even in limited companies. Between 1913 and 1920, the number of enterprises listed on the Amsterdam stock exchange doubled.[32] As companies used their new organizational strength to conquer new markets, this also resulted in economies of scope.

Structural Change

After 1914, industrial production recovered. 1916 was a year of high employment. Due to high demand and limited supply, prices increased while wages stagnated. Thus, between 1913 and 1917 real labour costs declined by 17 percent, yielding high profits.[33] The increase in competitiveness is partly explained by the growth of capital stock by 4.6 percent on average between 1913 and 1921.[34] However, in 1917 and 1918, the collapse of trade caused a setback. Exceptions were sectors promoted to improve economic independence such as steel, mining, or public utilities. Since the setback was war-related and a quick end of hostilities expected, labour-hoarding became common in order to prepare for post-war production. In industrial sectors, the war led to expansion, cooperation, and new companies producing goods that were previously imported. Thus between 1909 and 1920, total employment increased 31 percent, mainly in industry and to a lesser extent in services. The war strengthened the development of structural change in industry's favour.[35]

	Industrial production			**GDP**	
	1913	1921 *	1929	1913	1929
Germany	150	110	109	87	69
Belgium	-	105	99	90	76
Great Britain	132	118	110	110	88

Table 2: Industrial production and GDP per worker in some Western-European countries. Index, the Netherlands=100.[36] *For Germany 1925.

According to Table 2, competitiveness improved as labour-productivity in neighbouring countries decreased as a percent of Dutch labour productivity. Before 1913, a British industrial worker was 32 percent more productive than a Dutch one; a German 50 percent. In 1921, this difference was reduced to 18 and 10 percent respectively, and it almost disappeared in the 1920s. In short, Dutch industry caught up with its neighbours. The high productivity that characterized the Dutch economy as a whole – reflected in the level of GDP per worker – also applied to the industrial sector and in 1929 Dutch efficiency surpassed all neighbouring countries.

Post-war Consequences

When the armistice was signed, Dutch industry was ready to supply the continent. However, the 1918 truce did not immediately result in orders. Many expected lower prices and waited. 1919 brought improvement to some industries, but uncertainty remained. Compared to the war years, improvements were undeniable, but for some industries developments were disappointing. Only in 1920 did industry grow abruptly, but the low exchange rate of several currencies, primarily the German mark, undermined Dutch competitiveness. Currency problems even plunged some sectors into depression and there were complaints about imports below cost.[37] In addition, the slump in shipping resulted in a virtual shutdown of shipbuilding. Nonetheless, after the post-war problems were overcome, modernization bore fruit. This did not compensate for the collapse of the first wave of globalization. However, due to its increased competitiveness the Netherlands could partly offset the repercussions with a larger share in world trade. From 1918 until the guilder became overvalued in September 1931, both the weighted and unweighted Dutch exports share in world trade was 10-30 percent higher than before the war.[38]

In the long run, the collapse of the German *mark* and French and Belgian *francs* motivated Dutch companies, whose competitiveness was undermined by foreign depreciations, to defend their position by acquiring or setting up foreign subsidiaries. In Central European inflation countries like Germany one could buy a lot with guilders. In 1923 the purchasing power of the guilder in Germany was 28 times higher than before the war.[39] For major companies – Philips, the margarine manufacturers Jurgens, Van den Bergh (Unilever), and AKU (Akzo) – this became a period of acquisitions that lasted until 1929.[40] In addition, increased protection promoted the development of multinational companies, as industrial groups moved parts of their production abroad. As Dutch companies had made a great leap forward, they were now able to compete with foreign companies on a completely different footing. Van Zanden notes that the large multinationals, which would dominate the Dutch economy until the end of the 20th century, all were formed in 1920.[41] In 1913 most of these were only start-ups.

Conclusion

The blockade and submarine warfare were much more than a barrier to trade. World War I crushed the transnational northwest European economic region. Dutch businesses had to survive in a completely different setting. From 1915 growing domestic demand resulted in spontaneous import substitution, often involving horizontal and vertical integration. A huge increase of scale resulted. It was possible to finance this as prices rose and wages remained stable. Until 1917 real wages fell and profitability significantly improved. As companies had to take post-war competition into account, the reduction in labour costs did not result in low productivity. Instead, they invested in expansion and modernization, especially machinery.

In 1917-18, when the inflow of overseas products collapsed, the dependence on German cartels became clear and its dangers manifest. Government and industry now jointly initiated the national production of strategic commodities. State mines expanded and steps were taken to create blast furnaces. Thus, in the first years of war, the Netherlands underwent spontaneous import substitution, which in later years was more organized and state supported. After 1918 the country was much less dependent on foreign supplies. Consequently, imports never reached their pre-war level again. Due to its enhanced competitiveness, the Netherlands was able to increase its share in world trade, but this did not prevent the economy from remaining less connected with surrounding countries. Nonetheless, the war brought the neutral Dutch, always a little backwards in industry, enormous improvements in organization and competitiveness.

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Section Editors: Samuël Kruizinga; Wim Klinkert

Notes

1. ↑ This text is partly based on: Klemann, Hein A.M.: Ontwikkeling door isolement. De Nederlandse economie 1914-1918 [Development through isolation. The Dutch economy 1914-1918], in: Kraaijestein, M. / Schulten, P.: Wankel evenwicht. Neutraal Nederland en de Eerste Wereldoorlog [Delicate balance. Neutral Netherlands and the First World War], Amsterdam 2007, pp. 271-309.
2. ↑ Brands, M.C.: The Great War die aan ons voorbij ging. De blinde vlek in het historische bewustzijn van Nederland [The Great War that passed us by. The blind sopt in the historical consciousness of the Netherlands], in: Berman, M. / Blom, J.C.H.: Het belang van de Tweede Wereldoorlog [The importance of the Second World War], The Hague 1997, pp. 9-20.
3. ↑ Rooy, P. de: Introduction, in: Abbenhuis, M.: The Art of Staying Neutral. The Netherlands in the First World War, 1914-1918, Amsterdam 2006, pp. 13-15.
4. ↑ Klemann, H.A.M. / Schenk, J.: Competition in the Rhine delta: waterways, railways and ports, 1870–1913, in: Economic History Review 66/3 (2013), pp. 826-847.
5. ↑ Ibid., pp. 840-845.
6. ↑ Wijnen, H. van: Grootvorst aan de Maas. D.G. van Beuningen 1877-1955 [Business Prince along the Maes. D.G. van Beuningen 1877-1965], Amsterdam 2004, p. 116; Carter, G.R.: The Rhenish-Westphalian Coal Syndicate, in: Economic Journal 22 (1912), pp. 137-145, here p. 140.
7. ↑ Nederlandsche kolen in Nederland verboden I [Dutch coal prohibited in the Netherlands], in: Nieuwe Rotterdamsche Courant (NRCrt), 7 April 1910, avond.
8. ↑ Bonikowsky, H.: Der Einfluß der industriellen Kartelle auf den Handel in Deutschland. Jena 1907.
9. ↑ Cement, in: NRCtr, 19 December 1911; Nederlandsch Cement Syndicaat, in: NRCrt, 7 December 1915.
10. ↑ Vries, Joh. de: Hoogovens IJmuiden 1918-1968. Ontstaan en groei van een basisindustrie [Blast furnace IJmuiden, 1918-1968. Origin and growth of a basic industry], IJmuiden 1968, p. 19.
11. ↑ CBS, Tweehonderd jaar statistiek in tijdreeksen [CBS, Two hundred years of statistics in time series], Voorburg 1999.
12. ↑ Smits, Jan-Pieter et. al.: Dutch GNP and it components, 1800-1913. Groningen 2000; CBS, Tweehonderd jaar statistiek; Brugmans, I.J.: Paardenkracht en mensenmacht. Sociaal-Economische geschiedenis van Nederland, 1795–1940 [Horsepower and human power. Social economic history of the Netherlands, 1795-1940], The Hague 1969, p. 386; CBS, Statline. Online: http://statline.cbs.nl/StatWeb/search/?Q=Handel+EU&LA=NL, accessed: 24 February 2016.
13. ↑ Moeyes, Paul: Buiten schot. Nederland tijdens de Eerste Wereldoorlog, 1914-1918 [Out of range. The Netherlands during the First World War, 1914-1918], Amsterdam 2001, p. 81.
14. ↑ Zaalberg, C.J.P.: The manufacturing industry, in: The Netherlands and the World War. Studies in the war history of a neutral, vol. II, New Haven 1928, pp. 3-111, there 47; Koninklijke landmacht. Online: www.landmacht.nl/legergroen/Historie/Tijdslijn/1914_1945/Mobilisatie.aspx, accessed 24 May 2012.

15. ↑ Klemann, H.A.M.: Waarom bestaat Nederland eigenlijk nog? Nederland-Duitsland. economische integratie en politieke consequenties 1860-2000 [Why does the Netherlands still exist? The Netherlands Germany. Economic integration and political consequences, 1860-2000], Rotterdam 2006.
16. ↑ Smit, C.: Nederland in de Eerste Wereldoorlog [The Netherlands in First World War, 1914-1918], vol. 2, 1914-1917, Groningen 1972, p. 73; Klemann, Hein / Wubs, Ben: River Dependence. Creating a Transnational Rhine Economy, 1850-2000, in: Hesse, Jan-Otmar: Europäische Wirtschafts- und Sozialgeschichte. Baden-Baden 2015, pp. 219-246.
17. ↑ Smit, Nederland in de Eerste Wereldoorlog 1972, p. 73; Kruizinga, Samuël: Overlegeconomie in oorlogstijd. De Nederlandse Overzee Trustmaatschappij en de Eerste Wereldoorlog [Managing the War Economy. The Netherlands Oversea Trust Company and the First World War], Zutphen 2012, passim.
18. ↑ De Vries, Joh.: Geschiedenis van de Nederlandse Bank V. Visserings Tijdvak 1914-1931 [History of the Nederlandsche Bank. Part 5. The Vissering Period, 1914-1931], Amsterdam 1989, p. 73 et seq.
19. ↑ Kuypers, Ivo: In de schaduw van de grote oorlog. De Nederlandse arbeidersbeweging en de overheid 1914-1920 [In the shadow of the Great War. The Dutch labour movement and government 1914-1920], Amsterdam 2002, p. 88.
20. ↑ Bie, Ronald van der: Een doorlopend grote roes. De economische ontwikkeling van Nederland 1913-1921 [A large continuous intoxication. The economic development of the Netherlands 1913-1921], Amsterdam 1995.
21. ↑ Zanden, J.L. van: Een klein land in de 20e eeuw. Economische geschiedenis van Nederland 1914-1995 [A small country in the 20th century. Economic history of the Netherlands, 1914-1995], Utrecht 1997, p. 154.
22. ↑ Zaalberg, The manufacturing industry 1928, pp. 9-11.
23. ↑ Jong, H.J. de: De Nederlandse industrie 1913-1965. Een vergelijkende analyse op basis van de productiestatistieken [The Dutch industry 1913-1965. A comparative analysis based on production statistics], Amsterdam 1999, p. 211.
24. ↑ Knibbe, Merijn: Agriculture in the Netherlands 1851-1950. Production and institutional change, Amsterdam 1993, p. 292.
25. ↑ Van der Bie, Een doorlopend grote roes 1995, pp. 92-93.
26. ↑ Van der Bie, Een doorlopend grote roes 1995 Knibbe, Agriculture in the Netherlands 1851-1950 1993, p. 292; van Zanden, Jan Luiten: Een klein land in de 20e eeuw. Economische geschiedenis van Nederlands 1914-1995, Utrecht 1997, p. 132.
27. ↑ Klemann, H.A.M.: Nederland 1938-1948. Economie en samenleving in jaren van honger en bezetting [The Netherlands 1938-1948. Economy and society in years of war and occupation], Amsterdam 2002; Klemann, H.A.M. / Kudryashov, Sergei: Occupied Economies. An Economic History of Nazi-Occupied Europe, 1939-1945, London 2012, passim.
28. ↑ Rooy, H. van: Criminaliteit van stad en land. Nijmegen en omstreken [Criminality in town and countryside. Nijmegen and its surroundings], Nijmegen 1949, p. 24; Moeyes, Buiten schot 2001, p. 121 e.v.
29. ↑ De Vries, C.W. / Vermeulen, W.H.: Nederland 1914-1918. Deel IV van, W.J. van Welderen Rengers. Schets eener Parlementaire geschiedenis van Nederland [The Netherlands 1914-1918. Part IV of W.J. van Welderen Rengers. Sketch of a parliamentary history of the Netherlands], The Hague 1955, p. 200.
30. ↑ Van Kamp, R.: De kolenvoorziening van Nederland gedurende de Eerste Wereldoorlog [The coal supply of the Netherlands in the First World War], Amsterdam 1968, p. 74; De Vries, Hoogovens 168, pp. 67-68; Brugmans, Paardenkracht 1968, p. 49.
31. ↑ Metze, Marcel: Anton Philips 1874-1951. Ze zullen weten wie ze voor zich hebben [Anton Philips 1874-1951. They will know with whom they are confronted], Amsterdam 2004, p. 102.
32. ↑ Sluyterman, K.E.: Dutch Business during the First World War and its aftermath, in: Markets and Embeddedness. Essays in honour of Ulf Olsson, Göteborg 2004, pp. 241-264, there 246-248.
33. ↑ Kuypers, In de schaduw 2002, p. 81; Van der Bie, Een doorlopend grote roes 1995, p. 144.
34. ↑ Van Ark, B. and de Jong, H.J.: Accounting for economic growth in the Netherlands since 1913, in: Economic and social history in the Netherlands 7 (1996), pp. 199-242.
35. ↑ Van Zanden, Een klein land 1997, p. 144.

36. ↑ de Jong, H.J.: De Nederlandse industrie 1913-1965. Een vergelijkende analyse op basis van de productiestatistieken, Amsterdam 1999.
37. ↑ Van der Bie, Een doorlopende groote roes 1995, passim.
38. ↑ Van Zanden, Een klein land 1997, p. 154.
39. ↑ Klemann, Hein A.M.: Competitiveness and German-Dutch Monetary Relations, 1871–1931, in: Vierteljahrschrift für Sozial- und Wirtschaftsgeschichte 100/2 (2013), pp. 178-196.
40. ↑ Sluyterman, Keetie: Kerende kansen. Het Nederlandse bedrijfsleven in de twintigste eeuw [Changing opportunities. Dutch business in the twentieth century], Amsterdam 2003, p. 119.
41. ↑ Van Zanden, Een klein land 1997, p. 63.

Selected Bibliography

Abbenhuis, Maartje: **The art of staying neutral. The Netherlands in the First World War, 1914-1918**, Amsterdam 2006: Amsterdam University Press.

Bie, Ronald van der: **'Een doorlopende groote roes'. De economische ontwikkeling van Nederland, 1913-1921 (‘A large continuous intoxication'. The economic development of the Netherlands 1913-1921)**, Amsterdam 1995: Thesis Publishers.

Brands, M. C.: **The Great War die aan ons voorbij ging. De blinde vlek in het historische bewustzijn van Nederland (The Great War that passed us by. The blind spot in the historical consciousness of the Netherlands)**, in: Berman, M. / Blom, J. C. H. (eds.): Het belang van de Tweede Wereldoorlog (The importance of the Second World War), The Hague 1997: Sdu Uitgevers.

Dunk, Hermann Walther von der: **Die Niederlande im Kräftespiel zwischen Kaiserreich und Entente**, Wiesbaden 1980: Steiner.

Euwe, Jeroen: **Amsterdam als Finanzzentrum für Deutschland, 1914-1931**, in: Klemann, Hein A. M. / Wielenga, Friso (eds.): Deutschland und die Niederlande. Wirtschaftsbeziehungen im 19. und 20. Jahrhundert, Münster 2009: Waxmann, pp. 153-172.

Euwe, Jeroen: **‘It is therefore both in the German and in the Dutch interest...’ Dutch-German relations after the Great War. Interwoven economies and political détente, 1918-1933 (thesis)**, Rotterdam 2012: University of Rotterdam.

Euwe, Jeroen: **The Rhine. Backbone of Dutch-German economic interdependence 1919-1933**, in: Jahrbuch für Wirtschaftsgeschichte / Economic History Yearbook 53/1, 2012, pp. 205-233.

Frey, Marc: **Der Erste Weltkrieg und die Niederlande. Ein neutrales Land im politischen und wirtschaftlichen Kalkül der Kriegsgegner**, Berlin 1998: Akademie Verlag.

Klemann, Hein A. M.: **Neutraliteit in de Eerste Wereldoorlog en de economische gevolgen in de jaren 20 en 30 (Neutrality in World War I and the economic consequences in the 1920s and 30s)**, in: Kok, Jan / Bavel, Jan van (eds.): De levenskracht der bevolking. Sociale en demografische kwesties in de lage landen tijdens het interbellum (The life of the population. Social and demographic issues in the lowlands during the interwar period), Leuven 2010: Universitaire Pers Leuven, pp. 49-78.

Klemann, Hein A. M.: **Wirtschaftliche Verflechtung im Schatten zweier Kriege 1914-1940**, in: Klemann, Hein A. M. / Wielenga, Friso (eds.): Deutschland und die Niederlande. Wirtschaftsbeziehungen im 19. und 20. Jahrhundert, Münster 2009: Waxmann, pp. 19-44.

Klemann, Hein A. M.: **Die Niederlande und Deutschland. Wirtschaftliche Integration und politische Konsequenzen 1860-2000**, in: Jahrbuch Zentrum für Niederlande-Studien 17, 2007, pp. 101-118.

Klemann, Hein A. M.: **Ontwikkeling door isolement. De Nederlandse economie 1914-1918 (Development through isolation. The Dutch economy 1914-1918)**, in: Kraaijestein, Martin / Schulten, Paul (eds.): Wankel evenwicht. Neutraal Nederland en de Eerste Wereldoorlog (Delicate balance. Neutral Netherlands and the First World War), Soesterberg 2007: Aspekt, pp. 271-309.

Kruizinga, Samuël: **Overlegeconomie in oorlogstijd. De Nederlandsche Overzee Trustmaatschappij en de Eerste Wereldoorlog (Managing the war economy. The Netherlands Oversea Trust Company and the First World War)**, Zutphen 2012: Walburg Pers.

Kuypers, Ivo: **In de schaduw van de grote oorlog. De Nederlandse arbeidersbeweging en de overheid, 1914-1920 (In the shadow of the Great War. The Dutch labour movement and government 1914-1920)**, Amsterdam 2002: Aksant.

Moeyes, Paul: **Buiten schot. Nederland tijdens de Eerste Wereldoorlog, 1914-1918 (Out of range. The Netherlands during the First World War 1914-1918)** (3 ed.), Utrecht 2014: De Arbeiderspers.

Sluyterman, Keetie E.: **Dutch enterprise in the 20th century. Business strategies in small open country.**, London 2016: Routledge.

Sluyterman, Keetie E.: **Dutch business during the First World War and its aftermath**, in: Graner, Staffan / Jonsson, Sverker; Gadd, Carl-Johan et al. (eds.): Markets and embeddedness. Essays in honour of Ulf Olsson, Gothenburg 2004: University of Gothenburg, pp. 241-264.

Zaalberg, C. J. P.: **The manufacturing industry**, in: DeMonchy, E. P. (ed.): The Netherlands and the World War. Studies in the war history of a neutral, volume 2, New Haven 1928: Yale University Press, pp. 3-111.

Zanden, J. L. van: **The economic history of the Netherlands, 1914-1995. A small open economy in the 'long' twentieth century**, London; New York 1998: Routledge.

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