

Wartime and Post-war Economies (The Netherlands)

By [Hein A. M. Klemann](#)

Summary

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 transshipment 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 in % | Added value | Employment | Growth in % | Added value | Employment | Growth in % | Added value | Employment | Growth in % | 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, 1914-1921²⁶

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.

Hein A. M. Klemann, Erasmus University Rotterdam

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