Did the German Occupation (1940–1945) Ruin Dutch Industry?

HEIN A. M. KLEMANN

Abstract

Until recently Dutch historiography of the Second World War focused on subjects typical for this period: repression, resistance, the Hunger Winter of 1944–5 and, above all, the Holocaust. If anything was written about the economy, it was about exploitation resulting in impoverishment and hunger. New calculations of macroeconomic statistics for the period 1938–48 show that industrial production did not in fact decline until after the end of 1941, and that the first one and a half years of the occupation were the best in a decade. This article addresses the central question of how the Dutch economy, and especially industry, developed during the German occupation of 1940–5, especially during the first years. The development of employment suggests that economic decline and exploitation do not form the only story to be told about the economy in those years. Nevertheless, in Dutch popular publications, and in the international literature, the opinion still persists that during the occupation the economies of occupied western Europe slumped. Another problem is, therefore, how to explain the positive elements in economic development, and how it is possible that in memories and historiography it took more than fifty years before the traditional story of decline and exploitation as the sole elements of wartime economic development were even questioned.

Introduction

Until recently Dutch historiography of the Second World War focused on subjects typical for this period: repression, resistance, the Hunger Winter of 1944–5 and, above all, the Holocaust. If anything was written about the economy, it was about exploitation resulting in impoverishment and hunger.[1] Industrial companies were

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[1] See L. de Jong, *Het Koninkrijk der Nederlanden in de Tweede Wereldoorlog* (The Hague: SDU, 1969–91) VII, ch.1.

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closed, raw material and machinery were taken, labourers were forced to work in Germany, and from what was produced there was barely enough left over to survive. The Germans left an impoverished country, a starving population and a smashed economy; in 1945 a Dutch official reported in the *New York Times*: 'If I had to describe Holland as it is today in a phrase, I would say that it is empty. There is almost nothing left.'[2]

However, new calculations of macroeconomic statistics for the period 1938–48 indicate that industrial production did not in fact decline until after the end of 1941, and that the first one and a half years of the occupation were the best in a decade.[3] Between 1938 and 1941, in industry alone 131,000 new full-time jobs (i.e. working 48 hours a week, 50 weeks of the year) were created. When including employment growth in the agriculture and services industry, and the recovery of cross-border work, dependent employment grew by 24 per cent, from 1,614,000 to 1,997,000 full-time jobs.[4] In December 1940 Arthur Seyss-Inquart, Reich Commissioner for the Occupied Netherlands, boasted in the *Völkischer Beobachter* (the most prominent newspaper of Nazi Germany) that he had achieved within a few months what the pre-war Dutch government had not managed to achieve since the late 1920s – that is, he had solved the unemployment problem.[5] After the war the remarks of Seyss-Inquart were soon forgotten. Historians probably considered them to be propaganda, especially because in 1947 the CBS (the Dutch National Statistical Office) reported that the Germans had 'solved' the unemployment problem by deporting labour.[6] In fact, of the 393,000 new jobs realised between 1938 and 1941 only 126,000 (one third) were located in Germany, and half of them were in normal cross-border labour. In 1931, two years before Hitler came to power, the Reichsmark (RM) became inconvertible, and wages earned in Germany could no longer be converted into guilders. As a result, cross-border work disappeared. However, in May 1940, when the monetary problems were resolved at the expense of the Dutch treasury, 60,000 Dutch workers living near the German border accepted jobs in that country again. It was not even necessary to use pressure; there were vacancies in Germany and, moreover, legal border crossing made it possible to participate in lucrative smuggling transactions. Nevertheless, jobs were probably the most important motivation, because in 1940 as well as in 1941 another 60,000 labourers from all over the Netherlands settled in Germany. Although some pressure was used, in this period most of them went of their own free will.

[2] Cited in Nehemiah Robertson, 'Problems of European Reconstruction', *Quarterly Journal of Economics*, 60, 10 (1945), 1–55.

[3] Klemann, *Nederland 1938–1948*, *passim*.

[4] Dependent mployment does not include self-employed persons, which in this period meant that this excludes businessmen but primarily all small shopkeepers and farmers. Klemann, *Nederland 1938–1948*, 433.

[5] Ernst Ermann, '"VB"-Gespräch mit Seyss-Inquart. Wie steht es in den Niederlande', *Völkischer Beobachter*, 1 Dec. 1940.

[6] CBS, *Sociale en Economische Kroniek der Oorlogsjaren, 1940–1945* (Utrecht: Uitgeversmaatschappij W. de Haan NV, 1947), 300.

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This article addresses the central question of how the Dutch economy, and especially industry, developed during the German occupation of 1940–5, especially during the first years of the occupation. The development of employment suggests that economic decline and exploitation is not the only story to be told about the economy in those years. Nevertheless, in Dutch popular publications, and in international literature, the opinion still persists that during the occupation the economies of occupied western Europe slumped. For instance, Adam Tooze recently wrote in his already famous *The Wages of Destruction* that in 'Belgium, the Netherlands and above all France, . . . economic activity collapsed in 1940, never to recover', while Götz Aly thought that everything had been said when he wrote about what was taken from these countries.[7] Another problem is, therefore, how to explain the positive elements in economic development in that period, and how it is possible that in popular memory and historiography it took more than fifty years before the traditional depiction of decline and exploitation as the sole elements of wartime economic development were even questioned. We start by addressing the last question.

Historiography

In 1945, when a Dutch official stated that 'there is almost nothing left', he was not alone with that impression.[8] People all over Europe had this impression and the post-war situation is still remembered as being so, even in the western part of the continent where this was simply not the case. In the period immediately after the liberation, when everybody was still traumatised by the suffering they had survived and refused to recognise any positive developments during the German years of war and occupation, Dutch war damage was estimated to be somewhere between 2.5 and 4.2 times the pre-war gross domestic product (GDP).[9] Clearly it was not only feelings that gave rise to this impression. All over Europe individuals, companies and governments had good reason to draw attention to the losses and to conceal the profitable business done in the preceding years. In 1945 European governments, confronted with almost unsolvable problems, showed the outside world a destroyed country, a ruined economy and starving people in the hope of compassion and US aid, or at least compensation from Germany. For instance, the Dutch government considered that the pictures in the Allied press of healthy Dutch girls celebrating VE day with American and British soldiers gave a wrong signal, and released photographs of starving children

[7] Adam Tooze, *The Wages of Destruction: The Making and Breaking of the Nazi Economy* (London: Penguin, 2007), 420. Tooze's grasp of the literature of the countries of occupied western Europe is weak. His bibliography gives the impression that he read hardly any French, and none of the other languages of occupied Europe. See also Götz Aly, *Hitlers Volksstaat. Raub, Rassenkrieg und nationaler Sozialismus* (Frankfurt am Main: S. Fischer Verlag, 2005), 166 ff.

[8] Robertson, 'Problems of European Reconstruction', 10.

[9] L. J. A. Trip, *De Duitsche bezetting van Nederland en de financieele ontwikkeling van het land gedurende de jaren der bezetting* (The Hague: Martinus Nijhoff, 1946), *passim*; 'Uittreksel uit het memorandum van de Nederlandse regering nopens haar schadevergoedingseisen jegens Duitsland', in J. J. van Bolhuis, *Onderdrukking en verzet. Nederland in oorlogstijd*, vol. 2 (Arnhem: Van Loghum Slaterus, s.a.), 326–7; Klemann, *Nederland 1938–1948*, 438.

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and elderly people, showing them in the most terrible circumstances.[10] Even in 1948, when new statistics showed that the situation was not as bad as feared, the minister of economics prohibited the publication of these macroeconomic data, lest it undermine his position in the ongoing negotiations for Marshall Aid.[11]

The public also exaggerated the situation. To gain compensation, to evade capital gains tax or other taxation introduced after 1945 all over Europe and for reasons of prestige, people presented themselves as victims, overstating their material losses, while profits – even when legitimately acquired – were hidden. Even in 2003, when I explained in a popular history magazine that for farmers the war years were financially not too bad, and that the Hunger Winter of 1944 was for many even a highly profitable time, I received a furious letter from a farmer's daughter. Even though I had made it clear that the fact that all the farmers together had earned good money did not mean that every individual farmer was a profiteer, she still thought I had calumnied her father.[12] Twenty years earlier, when Dr Gerard M. T. Trienekens (a Utrecht historian) demonstrated that the food situation in the occupied country was relatively good until September 1944, those of the war generation quickly rounded on him: 'A man of his age cannot know anything about the war,' was one of the more generous responses. Others placed this scrupulous historian in a similar category to Holocaust deniers, and the house of his cousin (who had exactly the same name) was plastered with swastikas and SS symbols.[13]

In former occupied countries (and nowadays even in Germany in view of the publications on the suffering caused by the Allied bombing and by Soviet soldiers who raped indiscriminately, as well as the misery of post-war refugees[14]), the public expects that historians writing about the war will emphasise that they were victims. The fact is that most people (even most of the Germans) were victims, but the demand that this should be emphasised is not entirely unselfish. Although it is possible that a person can be guilty and a victim at the same time, there is a widespread misunderstanding that victims are not guilty. Therefore, self-victimisation is a way of dealing with feelings of

[10] Gerard Trienekens, *Voedsel en honger in oorlogstijd. Misleiding, mythe, werkelijkheid* (Utrecht: Kosmos, 1995), 157.

[11] Anne-Marie Kuijlaars, *Het huis der getallen. De institutionele geschiedenis van het Centraal Bureau voor de Statistiek en de Centrale Commissie voor de Statistiek, 1899–1996* (Amsterdam: International Institute for Social History, 1999), 313–14.

[12] Hein A. M. Klemann, 'Bezetting en zwarte handel', *Spiegel Historiael*, 38 (1 January 2003), 10–16; see also Hein A. M. Klemann, '"Een ellende optocht naar de polder." Bezetting en de strijd om de voedselvoorziening', in Conny Kristel, ed., *Met alle geweld. Botsingen en tegenstellingen in burgerlijk Nederland* (Amsterdam: Balans, 2003), 162–83.

[13] G. M. T. Trienekens, *Tussen ons volk en de honger. De voedselvoorziening 1940–1945* (Utrecht: Matrijs, 1985); Trienekens, *Voedsel en honger in oorlogstijd*, 6–7; stories told to the author by Trienekens, who was born in 1941.

[14] See Anonymous, *Eine Frau in Berlin, Tagebuch-Aufzeichnungen vom 20. April bis 22. Juni 1945* (Frankfurt-am-Main: Eichborn Verlag, 2003); Jörg Friedrich, *Der Brand. Deutschland im Bombenkrieg 1940–1945* (Munich: Propyläen, 2002); Lothar Kettenacker, ed., *Ein Volk von Opfern? Die neue Debatte um den Bombenkrieg* (Berlin: Rowohlt, 2003); Stephan Burgdorff and Christian Habbe, eds., *Als Feuer vom Himmel fiel. Der Bombenkrieg in Deutschland* (Bonn: Bundeszentrale für Politische Bildung, 2004); Stefan Aust and Stephan Burgdorff, *Die Flucht. Über die Vertreibung der Deutschen aus dem Osten* (Bonn: Bundeszentrale für Politische Bildung, 2003).

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guilt towards the real victims – in the first place the Jewish population – by a majority that simply tried to survive with a minimum of personal harm. Nevertheless, most people were victims and it is useless to accuse them for what they did or did not do. Heroism is an individual virtue.

In addition to self-victimisation is the phenomenon that everyone who was not a victim (for instance because he earned good money) is accused of collaboration and is thus at least morally condemned. Someone must be guilty, and the public is eager to point a finger at anyone whose wartime behaviour is ambiguous. Professional historians, giving way to these public demands and making moral verdicts, often take the easy way out. By checking how one behaved at critical moments, what relation one had to the resistance, how long one clung to an honourable – although in wartime ambivalent – pre-war position as an official, burgomaster or director, or what money one made, the verdict is clear. The case can be closed. Analysing and understanding one's behaviour no longer seems important.[15]

Although in the first years after the war some attempts were made to realise a Europe-wide history of war and occupation, or at least to compare national histories, in most countries the history of the Second World War became a field for a national, patriotic history and disintegrated into a number of stories about great patriotic wars. Comparison with neighbouring countries which had similar experiences is rare.[16] A comparison of the developments during the occupation period between, for instance, the Netherlands and Belgium would seem obvious but has never been written. A first attempt to compare some aspects of Dutch occupation history with that of Denmark has only recently been published.[17] Apart from that, in all former occupied countries the occupation is seen as a special period, demanding a special historiography. In the Netherlands, one historian, Dr L. de Jong, dominated this historiography, at least until the mid-1980s. He described the occupation as an isolated part of Dutch history, almost as a German (i.e. at least an un-Dutch) period on Dutch territory. The questions he and many others asked about these years were more moralistic than any professional historian would ever ask about any other period. A central issue was whether the persons involved were 'good' or 'bad'. Even more important, however, was that De Jong gave in to the semi-conscious need of the public to be recognised as victims and, by moralising about burgomasters and managers and so on, to their need to blame someone else. His books became very popular because he wrote what everybody wanted to hear about the war! Consequently, the historiography of the occupation focused on aspects in which this period differed from any other period– that is, on suppression, resistance, treason, the persecution of Jews, slave labour, going

[15] Peter Romijn, *Burgemeesters in oorlogstijd. Besturen onder Duitse bezetting* (Amsterdam: Balans, 2006) 310 ff.; J. Th. M. Houwink ten Cate, 'Generaal Winkelman, secretaris-generaal Hirschfeld en de Duitse bezettingspolitiek in mei–juni 1940', *Bijdragen en Mededelingen betreffende de Geschiedenis der Nederlanden* (BMGN), 105 (1990), 186–230.

[16] For ideas about comparing national history, see A. E. Cohen, 'Problemen der geschiedschrijving van de Tweede Wereldoorlog (1952)', in *A. E. Cohen als geschiedschrijver van zijn tijd*, ed. J. H. C. Blom et al. (Amsterdam: Boom, 2005), 77–110, at 80.

[17] Ralf Futselaar, 'Lard, Lice and Longevity: A Comparative Study of the Standard of Living in Occupied Denmark and the Netherlands, 1940–1945', Ph.D. thesis, University of Amsterdam, 2007.

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into hiding, plundering and warfare.[18] In fact, most people got on with their lives, carried on with their business, married, had children, went to school, to church, to the cinema and on holiday; they ate, drank, made love, quarrelled, were ill and in due course died, most of the time in bed just as in any other period.[19] The fact that most people continued with their normal life is not documented in traditional historiography. Consequently, the economic history of the war has always been the story of how Germany invaded a well-organised, wealthy country, plundered and destroyed it, and left it empty, half flooded and with a starving population.[20] Just over fifteen years ago a highly regarded, well-informed Anglo-Dutch economic historian wrote:

> German war aims in the Netherlands had started by encouraging a social revolution directed at the eventual assimilation of the racially superior Dutch into the Third Reich and had ended in a food blockade aimed against the major part of the population and the widespread pillage of industrial plant, transport equipment and stocks of consumer goods. In the process, levels of economic activity declined, living standards plummeted and there was a considerable net disinvestment of capital.[21]

This impression was formed directly after the war, and during the occupation it could also be found in the underground press or on the British radio. The traditional picture of the economy during the occupation not only matched with the idea that most people were victims, but also with the Allied propaganda. Just as during the war, when the London radio and illegal press were thought to be the only sources of reliable information, many people (even historians) even now implicitly think that Allied propaganda or illegal newspapers were more reliable than German propaganda or official papers. In any case, no one is interested in debunking stories told by parents and grandparents, especially when this could undermine their moral position.[22] Until recently, writing a scientific, less than patriotic, history of the war resulted in unfriendly, sometimes even aggressive, reactions. Nevertheless, in the 1980s some Dutch historians started to focus on other aspects of those years. The first to formulate critical remarks on traditional historiography, Hans Blom, wanted to place the occupation in the continuity of Dutch history. He wanted a less moralistic historiography and more attention paid to the 80 or 90 per cent of the people who were not persecuted and were not traitors or resistance fighters, but went on with

[18] L. de Jong, *Het Koninkrijk der Nederlanden in de Tweede Wereldoorlog*, Xb, 1384.

[19] See for instance Bob de Graaff, 'Widerstand und Kollaboration in den Niederlanden 1940–1945', *Jahrbuch Zentrum für Niederlande-Studien*, 2 (1991), 71–91, *passim*; Sytze van der Zee, *Voor Führer, volk en vaderland. De SS in Nederland* (Amsterdam: Prometheus, 1992), 56–7; Bob de Graaff, 'New Perspectives on the Second World War in Dutch Historiography', in Robert S. Kirsner, ed., *The Low Countries and Beyond* (Lanham: University of America Press, 1993), 207–18.

[20] De Jong, *Het Koninkrijk der Nederlanden in de Tweede Wereldoorlog*, VII, 1–269.

[21] Richard T. Griffiths, 'The Exploitation of the Dutch Economy 1940–1945', in J. P. B. Jonker, ed., *Vijftig jaar na de inval. Geschiedschrijving en Tweede Wereldoorlog* (The Hague: SDU, 1990), 115–24, 115.

[22] See 'Verarmend Nederland', in de Jong, *Het Koninkrijk der Nederlanden in de Tweede Wereldoorlog*,VII; L. de Jong, *Je Maintiendrai I. Het eerste jaar van de Nazi-tyrranie in Nederland* (London: Netherlands Publishing Company, 1941); L. de Jong, *Je Maintiendrai III. Het derde jaar der Nazi-tyrannie in Nederland* (London: 1944); L. de Jong, *Je Maintiendrai IV. Het vierde jaar der Nazi-tyrannie in Nederland* (London: Netherlands Publishing Company, 1945), 19; and Griffiths, 'The Exploitation of the Dutch Economy'.

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their normal life. He considered that new questions should be asked, which were in fact the same, normal questions as asked about any other period, including those about economic growth, industrial development, innovation, welfare and so on.[23] In that same decade Trienekens published his history on food distribution,[24] but it was only in the 1990s and the first years of the twenty-first century that the economic history of the occupation was entirely revised.[25] A new generation reconsidered the impression of destruction that had been given over and over again. In 1999 one of them wrote that much of what was always told was 'a myth, a carefully cherished story',[26] not a misinterpretation. Even those who knew that it was not true felt at home with this; it created a moral way out.

Dutch industrial production

By June 1940 all the continental enemies of Germany had been defeated, while Britain was saved because of poor German preparation. Nonetheless, it seemed impossible that Britain's armies could ever re-enter the continent on their own.[27] Hitler had won the war, and the most prominent Dutch politician of the inter-war period, the five-times prime minister Dr H. Colijn, rightly stated that every Dutchman should realise that Germany would decide the fate of the Dutch.[28] This situation only changed when Hitler and his allies (without any co-ordination) started new wars against the major powers of the world – the Soviet Union and the United States. In June 1940 nobody in western Europe could foresee that Hitler would thus undermine his previous victories. According to some modern historians, even after these ill-fated initiatives, it took another two years before it became obvious that the Allies would win. Others think that from US entry into the war in December 1941, the economic strength of the Allies was so superior that Germany's fate was as good as sealed.[29] Nonetheless, in summer 1940 the future of continental Europe seemed to be in the hands of the

[23] J. C. H. Blom, 'Nederland onder Duitse bezetting. 10 mei 1940–5 mei 1945', *Algemene Geschiedenis der Nederlanden. Volume 15* (Haarlem: Fibula Dischoeck, 1982), 55–94, esp. 55–6; J. C. H. Blom, *In de ban van goed en fout? Wetenschappelijke geschiedschrijving over de bezettingstijd in Nederland* (Bergen: Octavo, 1983), 12.

[24] Trienekens, *Tussen ons volk en de honger.*

[25] Hein A. M. Klemann, 'De Nederlandse economie tijdens de Tweede Wereldoorlog', *Tijdschrift voor Geschiedenis* (TvG), 110 (1997), 3–40; Hein A. M. Klemann, ed., *Mooie jaarcijfers. Enige onderzoeksresultaten betreffende de Nederlandse economische ontwikkeling tijdens de Tweede Wereldoorlog* (Utrecht: Utrechtse Historische Cahiers, 1997); Hein A. M. Klemann, 'De legale en illegale productie in de landbouw 1938–1948', *NEHA-Jaarboek voor economische, bedrijfs- en techniekgeschiedenis*, 60 (1997), 307–38; Hein A. M. Klemann 'Discussie. Landbouw tijdens de oorlog en slachtofferschap in de historiografie', TvG, 111 (1998), 474–86; Hein A. M. Klemann, '"Belangrijke gebeurtenissen vonden niet plaats. . .": De Nederlandse industrie 1938–1948', *BMGN*, 114 (1999) 4, 506–52; H. J. de Jong, *De Nederlandse industrie 1913–1965. Een vergelijkende analyse op basis van de productiestatistieken* (Amsterdam: NEHA, 1999).

[26] De Jong, *De Nederlandse industrie*, 326.

[27] Richard Overy, *Why the Allies Won* (London: Pimlico, 1995), 13.

[28] H. Colijn, *Op de grens van twee werelden* (Amsterdam: De Standaard, 1940), 51.

[29] Mark Harrison, 'The Economics of World War II: An Overview', in Mark Harrison, ed., *The Economics of World War II: Six Great Powers in International Comparison* (Cambridge: Cambridge University Press, 1998), 10; Tooze, *Wages of Destruction*, *passim*; Overy, *Why the Allies Won*, 316 ff.

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Table 1. *Dutch industrial development, 1938–1948*

	Industrial employment		Profitability of industry	(million 1938 guilders)			Index of industrial production
Year	Full-time jobs (,1000)	1938=100	1938 = 100	Legal industrial production	Clandestine industrial production	Total industrial production	1938=100
1938	856	100	100	1584	0	1584	100
1939	908	106	123	1780	0	1780	112
1940	904	106	144	1679	18	1697	107
1941	987	115	138	1623	168	1790	113
1942	915	107	95	1263	219	1482	94
1943	830	97	65	1128	193	1321	83
1944	759	89	16	790	256	1046	66
1945	689	80	16	794	266	1061	67
1946	968	113	132	1209	166	1375	87
1947	1103	129	134	1606	188	1794	113
1948	1227	143	144	1805	143	1948	123

Source: Hein A. M. Klemann, *Nederland 1938–1948. Economie en samenleving in jaren van oorlog en bezetting* (Amsterdam: Boom, 2002).

Reich. Under these circumstances it was not too difficult to find adventurous young men in the occupied countries who were ready to 'back the German horse' and accept employment in that country. In fact, when unemployment rose again in June 1940 (after a decade of economic depression and a lost war), the unemployed began queuing for jobs in Germany.[30] The misery resulting from unemployment was still only too familiar. In the end, however, the economic situation in 1940 proved not to be as depressing as people had assumed. Before August, industrial employment grew again to reach an all-time peak in 1941 (15 per cent above the 1938 level), while industrial profitability peaked in 1940 as it had not done since the late 1920s, at 44 per cent above the level of 1938 (see Table 1). Notwithstanding military defeat, in 1940 many companies paid higher dividends to their shareholders.[31] In 1941 profits were slightly down, but were still much higher than at any time since 1929, and were 38 per cent above the 1938 level.

Once it had become obvious that there was something wrong with Dutch wartime macroeconomic statistics, they had to be recalculated; moreover, there are reasons to believe that the same applies to all of western Europe.[32] During the occupation the public did not trust government organisations and only reluctantly gave information

[30] Klemann, *Nederland 1938–1948*, 432–3 and caption.

[31] 'Nederlandsche economie in Oorlogstijd', *Keesings Historisch Archief*, 11–17 May 1941, 4675.

[32] Hein A. M. Klemann, 'Waarom honger in Europa in de Tweede Wereldoorlog?', in Hein A. M. Klemann and Dirk Luyten, eds., *Thuisfront. Economie en oorlog in Europa in de 20e eeuw. Niod-Jaarboek* 14 (Zutphen: Walburg Pers, 2003), 113–25.

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to institutes such as the CBS. Even before the liberation the Dutch economic department concluded that the CBS lacked adequate information to produce reliable statistics.[33] Therefore the analysis of the wartime industrial development in the present paper is based on these newly calculated statistics, reconstructed without using any wartime CBS data. The new calculations are based on the fact that production equals the sum of labour and capital incomes before taxation. Social security statistics provided information about the number of employees and the sum of wages paid in each of the thirteen sectors of Dutch industry. Consequently the calculations can be slightly too low, but can only be too high if employers paid more in social security than they were obliged to. Furthermore, the profitability of each industrial sector was reconstructed from profits, reserves and depreciations from the annual reports of several hundred companies spread over all branches of industry. For each company the data were standardised and, from the outcomes, average profitability per sector was calculated. As the Netherlands had no taxation on profits before the war, Dutch companies had no reason to hide them. Therefore it is unlikely that pre-war data about profitability are too low, but it is possible that from 1940 onwards, when such taxes were introduced, companies tried to conceal some returns to avoid paying taxes. Consequently the estimate is also more likely to be too low than too high. To link the series of the development of capital and wage incomes, pre-war CBS data on the 1938 share of wages and capital incomes in each industrial sector were used, and real production was computed with a newly calculated Paasche price index.[34]

However, all these calculations could not resolve the problem that official statistics (whether from the CBS, from social security or from annual reports) never included black-market transactions, while production for that particular market was of increasing importance. Even if all data had been reliable, the macroeconomic figures of that period would be too low because they did not include clandestine production, and the indicated decline would also be too dramatic because it included the transfer of production to black markets, while post-war growth would appear too high because official statistics after the war reflected a mix of real growth and the registration of (up until recent years) unregistered production. This is not a typically Dutch problem, but was replicated all over Europe. During the war in France, Belgium or Denmark, and just after the war in Germany, black markets flourished. In fact, until 1944 black-market production was probably relatively limited in the Netherlands. Black marketing more or less slowly disappeared only after 1945, or in Germany after 1948.[35] When Eichengreen called German economic growth in 1948 after the introduction of the Deutschmark 'nothing short of miraculous' (according

[33] Klemann, *Nederland 1938–1948*, 231–2; NIOD (Archive of the Netherlands Institute of War Documentation), 212a, 5e: Afd. Economisch onderzoek: De omvang van de Duitsche opdrachten in de industrie in Nederland, Augustus 1944.

[34] Klemann, *Nederland 1938–1948*, 265–300. See also Klemann, '"Belangrijke gebeurtenissen vonden niet plaats. . ."', 506–52.

[35] John Gillingham, 'How Belgium Survived: The Food Supply Problem of an Occupied Nation', in B. Martin and A. S. Milward, eds., *Agriculture and Food Supply in the Second World War* (Ostfildern: Scripta Mercatorae Verlag, 1985), 69–88; Lynne Taylor, 'The Black Market in Occupied Northern France, 1940–1944', *Contemporary European History*, 6, 2 (1997), 153–76; Paul W. Sanders, 'Prélèvement

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to official statistics, industrial production grew by 50 per cent in six months), it is clear that, apart from some growth, these series reflect the recovery of normality and the legalisation of previously clandestine production.[36] Consequently, official production figures without taking account of black-market production give the false impression that the economy slumped even more dramatically than it actually did during wartime, and grew miraculously after the liberation, especially after liberation from wartime regulations. This false impression can be found all over Europe.

To make a cautious, and therefore probably too conservative, estimate of Dutch clandestine industrial production, information was gathered from diverse sources for each sector around 1942 and 1943. These years were selected because they came after the first unsteady years of the occupation and before the Third Reich fell apart and crushed in its fall organised society all over continental Europe. As a cautious guess, in branches using locally produced raw materials (mining, food processing, shoemaking, some parts of textiles and wood processing) at least 15 per cent of the total production was for the black market. In branches processing raw materials from elsewhere (where it was easier to control production) 10 per cent seems to be a cautious estimate. Before the war there was no reason for any clandestine production; with the exception of the alcohol and cigar industries there was no taxation or regulation to make that interesting. The way in which black markets developed in general during the war could be reconstructed in agriculture, where a system existed before the war that allowed the calculation, at least of important parts of production, independently in two different ways.[37] Thus, by taking into account the way in which the black market developed in general, the level of the market in each industrial sector in 1942 and 1943, and the fluctuation between the sectors, it is possible to make a reasonable estimate of the development of clandestine industrial production and to reconstruct a more reliable, but probably rather low, index of industrial production (and even of the GDP) including black market production.[38] The outcome gives a different impression from that derived from economic development based on the old CBS series. Production did not collapse but initially even boomed, and it only started to give way from the last months of 1941 onwards. The economic decline during the whole occupation period – that is, the decline in national income (according to the

économique, les activités allemandes de marché noir en France 1940- 1943', in Olivier Dard, Jean-Calaude Daumas and François Marcot, eds., *L'occupation, l'état Français et les entreprises* (Paris: Association pour le développement de l'histoire économique, 2000) 37–67; Paul Sanders, *Histoire du marché noir, 1940–1946* (Paris: Perrin, 2001); R. Miry, *Zwarte handel in evensmiddelen* (Brussels: Manteau, 1946); Claus Bundgård Christensen and Ralf Futselaar, 'Zwarte markten in de Tweede Wereldoorlog. Een vergelijking tussen Nederland and Denemarken', in Klemann and Luyten, eds., *Thuisfront*, 89–110.

[36] Barry Eichengreen, *The European Economy since 1945. Coordinated Capitalism and Beyond* (Princeton: Princeton University Press, 2007), 72.

[37] Trienekens, *Tussen ons volk en de honger*, 239 ff.

[38] See Trienekens, *Tussen ons volk en de honger*; Hein A. M. Klemann, '"Die koren onthoudt, wordt gevloekt onder het volk ...": De zwarte markt in voedingswaren, 1940–1948', *BMGN*, 115, 4 (2000), 532–60. Attempts to calculate the black markets from monetary development failed because of the suppression of normal inflation. The monetary overhang (which was enormous) could not be calculated as long as the size of, and prices, on the black market are unknown.

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CBS almost 50 per cent in 1944 and 1945) – was according to these later calculations less than 20 per cent, while the decline in industrial production (according to the CBS 64 per cent in 1944 and 73 per cent in 1945) was in fact only 34 per cent.[39] Inevitably, this conclusion raises the question: what is the explanation for this relatively positive industrial development?

Although in 1940 industrial employment and profitability grew, production declined as a result of uncertainty and the dismantling of production for the Dutch army directly after the May 1940 invasion.[40] Before the end of 1940, however, business recovered, but during this year an increasing part of production was already being kept out of the books. New regulations and taxation, resulting in the freezing of prices, the limitation of transactions and – for the first time in Dutch history – taxation of profits were reasons to sell an increasing part on the black market. That these regulatory measures were often seen as inimical interference with Dutch society gave black marketing a moral justification or, as the daughter of a black-market trader wrote in her diary, 'Illegal butchering, that is in fact sabotage. You are keeping meat out of the hands of the Wehrmacht.' After this she explained how profitable it was and it becomes clear that this was the real source of her motivation.[41] Figure 1 shows that the peak in legal industrial production occurred in 1939, but that until 1941 the decline was limited, in fact so limited that production for the black market compensated for it completely. Total industrial production only peaked in 1941. From then on a discrepancy developed between legal and total industrial production, only to disappear slowly after the war. This took so much time because it was not the 'military liberation', but the liberation of markets from wartime regulations that made black marketeering less interesting. That such clandestine activities continued after the liberation shows that one should be sceptical about patriotic arguments for it; most of the time profits were the real motive.

In Figure 2 the newly calculated industrial production series is compared with the CBS index calculated in 1947 (completed for post-war years from later CBS statistics) and the 1999 series of H. J. de Jong.[42] According to this series (based on never previously used CBS production statistics for an important number of industrial branches), the production level is comparable to the new index of legal industrial production.[43] It shows that the new calculations give a good indication of legal production, but as the de Jong series does not include the black market his results are lower than the newly calculated total production series. De Jong could not include clandestine production because his data came from official sources. Therefore, from

[39] Klemann, *Nederland 1938–1948*, 299; CBS, *Sociale en Economische Kroniek der Oorlogsjaren*, 24.

[40] This was possible because wages were frozen, while prices were slightly more flexible and increased.

[41] 'Vrouwelijke kantoorbediende, 19 jaar – Amsterdam, 10 Mei 1942', in *Dagboekfragmenten 1940–1945* (The Hague: Martinus Nijhoff, 1954), 167–9.

[42] De Jong, *De Nederlandse industrie*. See also Herman J. de Jong, *Catching Up Twice. The Nature of Dutch Industrial Growth during the 20th century in a Comparative Perspective* (Berlin: Akademie Verlag, 2003). H. J. de Jong is not related to L. de Jong.

[43] That from 1941 the de Jong series is slightly below the new legal production series is related to the fact that the CBS no longer received all information because the public no longer trusted this government organization.

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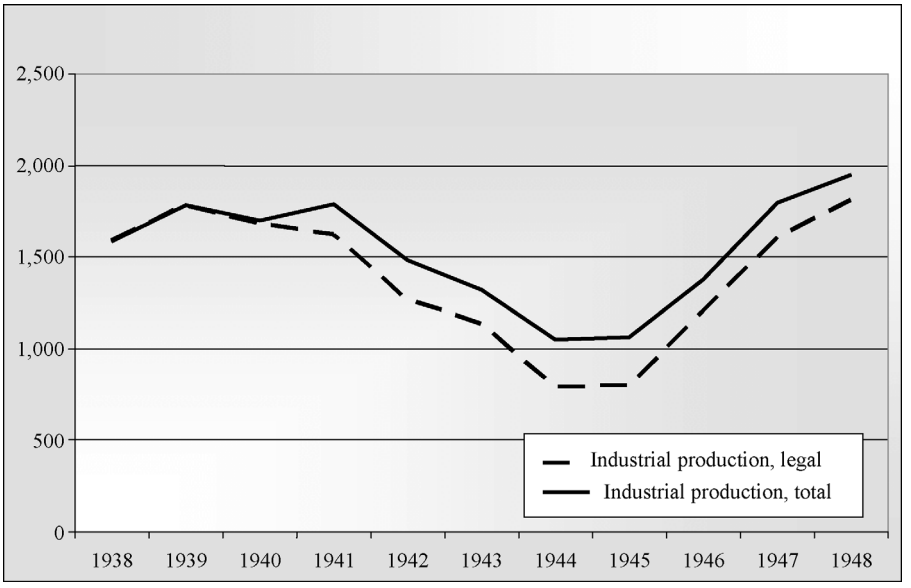


Figure 1. *Industrial production in 1938 guilders (million), 1938–1948.*
Source: Hein A. M. Klemann, *Nederland 1938–1948. Economie en samenleving in jaren van oorlog en bezetting* (Amsterdam: Boom, 2002).

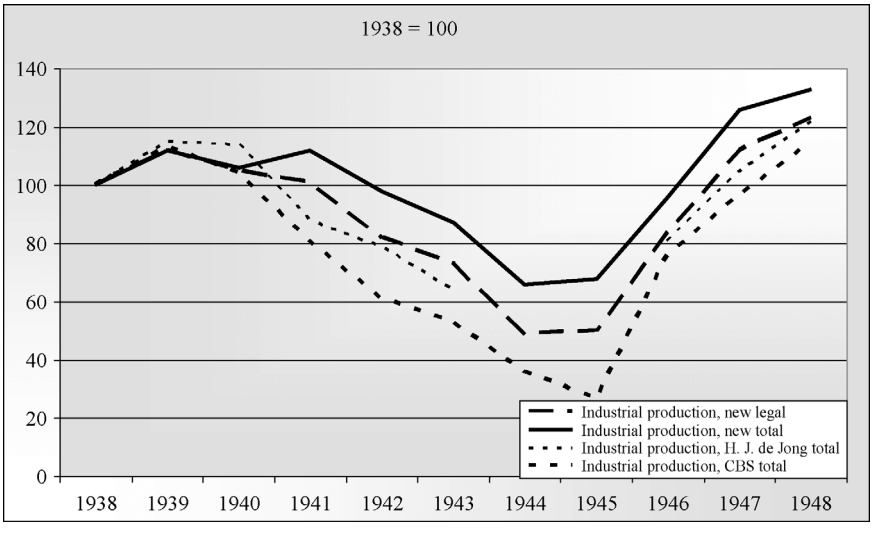


Figure 2. *Industrial production, 1938–1948 (excluding mining and building).*
Source: Hein A. M. Klemann, *Nederland 1938–1948. Economie en samenleving in jaren van oorlog en bezetting* (Amsterdam: Boom, 2002).

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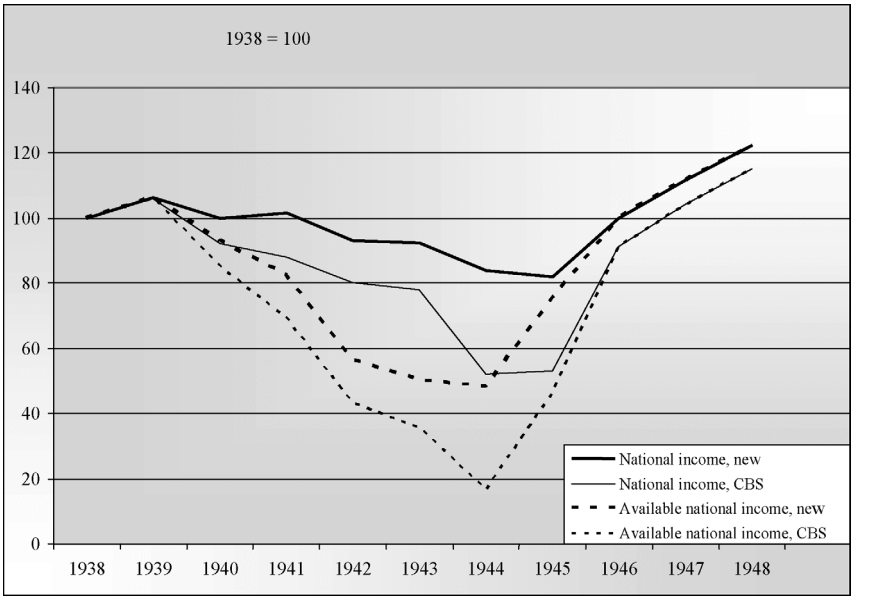


Figure 3. *National income and available national income, 1938–1948.*
Source: Hein A. M. Klemann, *Nederland 1938–1948. Economie en samenleving in jaren van oorlog en bezetting* (Amsterdam: Boom, 2002).

1941 on, total production is higher. Although the de Jong series (like the newly calculated legal production series or the old 1947 CBS series) does not include clandestine production, the 1947 index is far below the new ones and the differences are too large for normal statistical inaccuracy. De Jong proved that the CBS had better information than it used in 1947. This raises the unanswerable question as to whether the construction of these statistics was politically motivated. As it is unknown how the 1947 CBS statistics were calculated, the answer seems to be lost in time. It is, however, a fact that the same source suggested that the disappearance of unemployment resulted from the deportation of labour. It gives the impression that, just after the war, the CBS did everything it could to prove how severely the Dutch suffered from German exploitation. The extreme decline in industrial production – according to the CBS series, industrial production was at its lowest point in 1945, at 27 (1938=100) – gives the same impression. According to the new calculations the lowest point was 50, and including clandestine production it was 66 (1938=100).[44]

In Figure 3 the solid bold line represents the newly calculated national income, and the bold broken line the available national income after the occupier had taken his share of production without paying for it. This clearly shows that after 1943, even according to the new calculations and including clandestine production, the country

[44] The CBS never provided any information as to how these were calculated. CBS, *Jaarcijfers voor Nederland 1943–1946* (Utrecht: Uitgeversmaatschappij W. de Haan NV, 1948); CBS, *Economische en Sociale Kroniek*.

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survived on less than 50 per cent of what it was used to before the war. When the same calculations are made with the 1947 CBS national income series (based on the same sources as the industrial production series) – the thinner lines – in 1944 the available national income (the thin broken line) is only 17 per cent of the 1938 level. This cannot be the case. Most of the Dutch survived the war; the population actually grew. Although the calculations show that from 1942 onwards there is an undeniable economic decline, it is also clear that only to a limited extent did poverty result from declining production. Compared with 1938, total production (GDP) fell by a maximum of 14 per cent and national income by 18 per cent. This does not imply that the situation was not bad. National income was still around 80 per cent of the 1938 level even in 1944 and 1945, but more than 40 per cent of production was taken by the occupier. Extractions paid for by the Dutch treasury or by inflating the money supply were the main source of poverty. Apart from emotional and political reasons for keeping the story of wartime poverty alive, these extractions of goods and services produced by the Dutch explain the discrepancy between the high level of production and the experience of extreme poverty. That the same story can apply to, for instance, France, becomes clear from Tooze's book. According to him (and he got his information from Milward's earlier book on the French economy) until the end of 1943 the Germans took the equivalent of 30.4 billion RM out of France, while in the last year the 'progressive disintegration of the French economy' resulted in a decline in production by a third since 1938.[45] Actually, according to official statistics, industrial production declined by 60 per cent, while during the whole occupation period the occupier took from France the equivalent of 35.1 billion RM in goods and services, as far as these were paid for from French sources.[46] Again, this seems impossible. It would mean that the French survived on less than a third of their pre-war consumption levels. According to the specialist on French black marketeering, however, such markets developed in that country from the first day of the occupation.[47] The fact that in the Netherlands industrial production declined by only a third, and not by two thirds (and even grew in the second half of 1940 and in 1941) nevertheless needs some explanation.

Industrial development 1940–1941

According to German army plans, the military would rule Belgium, the Netherlands and Luxembourg. Only after the queen fled did Hitler send a civilian, the high-ranking Nazi Arthur Seyss-Inquart, to The Hague. By then the decision to rule by *Aufsichtsverwaltung*, a controlling administration, had already been taken. Local officials were controlled by Germans and ordered to keep things going. In 1937 the Dutch government had decreed that in the case of an occupation, burgomasters and

[45] Tooze, *Wages of Destruction*, 393 and 643; A. S. Milward, *The New Order and the French Economy* (Oxford: Clarendon, 1970), 279.

[46] Klemann, *Nederland 1938–1948*, 114.

[47] Paul Sanders, 'Economic Draining – German Black Market Operations in France, 1940–1944', *Global Crime*, 9 (2008), 136–168, there 139 ff.

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officials should stay at their posts in the best interests of the population. Thus the meetings of the secretaries-general – the highest civil servants of the ministries – de facto became a technocratic cabinet under Seyss-Inquart's supervision.[48] The official structure was clear. Dutch officials ruling the country were controlled by Seyss-Inquart and his staff. Officially, Hitler was Seyss-Inquart's direct superior, and the only Berlin authority who could give him orders; however, as soon as he arrived Seyss-Inquart found his authority disputed. The Wehrmacht was not happy when, three days after the Dutch capitulation, Hitler decided to send a civilian. General Alexander Freiherr von Falkenhausen (an aristocratic Prussian officer who was not a Nazi) had already received orders to rule this part of Europe. Now a party fanatic was sent, known by the Wehrmacht's economic office as a troublemaker. In Poland, where he was second in command, Governor-General Frank ruled the country as though it was a private domain. General Georg Thomas, head of the economic office of the Wehrmacht, feared that Seyss would do the same, making it impossible to exploit the highly developed Dutch economy. Therefore he sent an officer to The Hague to press Dutch industry into accepting German military orders. To strengthen his position, Thomas involved his enemy, Hermann Göring.

Göring was interested in the Netherlands – and not only for buying seventeenth-century paintings from shady sources. Therefore he made sure that he gained the right to give Seyss-Inquart instructions in economic matters.[49] Being used to the ongoing struggles in Hitler's entourage, he knew that this would result in conflict and therefore accepted Thomas' invitation to participate in his project in The Hague. Thus, before Seyss-Inquart even arrived in the country, Thomas's officer founded a *Rüstungsinspektion* (armaments office) in The Hague.[50] When the Reich commissioner arrived, he found his opponents already holding office in the heart of his realm. If he accepted this situation, the economic policy would be a matter of the authorities in Berlin plundering the country that Seyss was ordered to win over for a German future. In any case Seyss-Inquart had to establish that he was number one in the Netherlands, otherwise the Reich Marshal, who had a direct line to Adolf Hitler, would walk all over him.[51]

Apart from Göring's policy and the need to defend his position, Seyss-Inquart was motivated to start an economic policy of his own due to the unemployment problem. Although Hitler had already asked Göring to prepare the exploitation of occupied western Europe as early as November 1939,[52] little planning had taken place before summer 1940. Just before the capitulation of France Göring made

[48] E. H. Kossmann, *De lage landen 1780–1980. Twee Eeuwen Nederland en België* (Amsterdam: Elsevier, 1980), 156.

[49] De Jong, *Het Koninkrijk der Nederlanden in de Tweede Wereldoorlog*, IV, 27.

[50] Houwink ten Cate, 'Generaal Winkelman, secretaris-generaal Hirschfeld', *passim*; Joggli Meihuizen, *Noodzakelijk kwaad. De bestraffing van economische collaboratie in Nederland in de Tweede Wereldoorlog* (Amsterdam: Boom, 2003), 70 ff.

[51] De Jong, *Het Koninkrijk der Nederlanden in de Tweede Wereldoorlog*, IV, 102.

[52] Arne Radtke Delacor, 'La place des commandes Allemandes à l'industrie Française dans les stratégies de guerre nazies de 1940 à 1944', in Dard, Daumas and Marcot, *L'occupation*, 11–24, at 12–13.

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up for his earlier inactivity by ordering the removal of all raw materials from the newly occupied countries. Göring, who was a genius with regard to power politics, knew little about economics and saw the occupied countries merely as a source of loot.[53] In June Walther Funk, de facto Göring's man, even ordered the removal of machinery from France.[54] Seyss-Inquart could not of course accept that Göring would plunder the country that he planned to lead into a Germanic Reich. Therefore, assisted by Dutch officials, he formulated arguments to defend Dutch stocks. It would not be the last time that the Dutch and Germans in The Hague co-operated to withstand demands from Berlin. Earlier, the policy adopted by Napoleon's brother Louis, King of Holland, has shown that the interests of the occupier as interpreted by the authorities in an occupied country could grow far apart from those as seen by the authorities in the victorious country. Consequently, only a few weeks after Berlin had sent Seyss-Inquart to The Hague, he was defending Dutch interests against the Reich capital. Nevertheless, in the end Dutch companies had to sell all stocks of raw materials in excess of those required for six months' normal production.[55] The Germans paid good prices, with money taken from the Dutch treasury, but it was impossible for these stocks to be replenished.

After the first clash with Göring, the Reich Commissioner feared new and hard-to-withstand demands from Berlin if he did not find a way to make the Dutch useful for the German war effort. In The Hague, the Dutch as well as the Germans feared that Berlin would consider the level of unemployment, which grew higher than ever, to be unacceptable. As long as this remained unresolved, The Hague had no answer for Berlin's imminent demand for workers, even though Seyss knew only too well that coercing Dutch labourers to work in Germany would effectively bring his mission to an end. Because it was in his interests to create jobs, he encouraged German companies to divert orders with which they could not cope (the German economy was already overcharged) to Dutch companies with enough capacity and raw materials. Although the German historian Hans Umbreit wrote that the Nazis (after occupying western Europe) had the choice of slaughtering the cow or milking her (i.e. the occupier could plunder and destroy the economies or make the production capacity of these countries serve its war efforts), in the work of Tooze plunder and destruction appear to be the only option.[56] In fact, Seyss-Inquart made sure that at least in the Netherlands German demands, although creating monetary disaster in the long run, resulted in growth in the short term.

[53] R. J. Overy, *Göring: The 'Iron Man'* (London: Routledge & Kegan Paul, 1984), 138–9; Alan Bullock, *Hitler and Stalin. Parallel Lives* (London: Fontana, 1993), 590; R. J. Overy, *War and Economy in the Third Reich* (Oxford: Clarendon, 1995), *passim*; Milward, *New Order*, 7; De Jong, *Het Koninkrijk der Nederlanden in de Tweede Wereldoorlog*, IV, 338.

[54] Milward, *New Order*, 46–7; De Jong, *Het Koninkrijk der Nederlanden in de Tweede Wereldoorlog*, IV, 338; Patrick Nefors, *Industriële collaboratie in België. De Gallopindoctrine, de emissiebank en de Belgische industrie in de Tweede Wereldoorlog* (Leuven: Van Halewijck, 2000), 83.

[55] De Jong, *Het Koninkrijk der Nederlanden in de Tweede Wereldoorlog*, IV, 338.

[56] Hans Umbreit, 'Les politiques économique allemandes en France', in Dard, Daumas and Marcot, *L'occupation*, 25–35 (27); Tooze, *Wages of Destruction*, 419–20.

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In August 1940 a new institute, later named the Zentralauftragstelle (ZAST – Central Office of Orders), was founded to systemise such *verlagerte Aufträge*, that is, transferred orders. By that time, orders worth 375 million guilders had already been transferred.[57] This showed that Seyss-Inquart had won his battle with Göring, mainly because his policy was effective. In 1940 alone, through the agency of the ZAST, orders worth 14 per cent of Dutch GDP were placed, creating the jobs of which Seyss-Inquart was so proud.[58] When in July 1940 Hitler decided to attack the USSR the following spring, Göring was forced to recognise that plundering western Europe no longer served any useful purpose. He therefore needed a method to involve the economies of western Europe in the German war effort. Seyss' method seemed to be the most appropriate way of achieve this, since it did not require the incorporation of the economies into German economic planning; because German economic planning was far from efficient,[59] it seemed impossible to incorporate them within it. However, *Verlagerte Aufträge* created the opportunity of incorporating these economies without a central planning system. Göring therefore founded *Zentralauftragstellen* in Paris and Brussels, while Seyss's organisation became a joint venture of the two high-ranking Nazis condemned to work with each other.

An occupier can use an occupied country either by plundering its means of production and destroying its economy or by making that country's production capacity available for its own ends. By implementing the policy of transferred orders, Göring has decided to follow the second policy. Thus Seyss-Inquart could concentrate on winning the Dutch for a German future. Consequently, until the end of 1941, German exploitation of the Dutch economy was intensive but not destructive. Huge orders were given to Dutch companies and paid for from the Dutch treasury or by expanding the money supply. The resulting financial problems were transferred to the post-war future by a rationing system and price control. The German purchases, in 1940 and 1941 worth 7 and 19 per cent respectively of Dutch national income,[60] had the effect of stimulating fiscal policy and solving the problems of unemployment and pre-war poverty, but at the same time creating an unstable monetary situation.

Investments in the first years of war

In 1940 and especially 1941, growth resulted in investments. After the war, however, everybody was obsessed with damage, calculated at 4.2 times pre-war GDP.[61] New research shows, however, that at least some of these figures are unreliable. For a long time it was commonly assumed that in the last months of the occupation Germany confiscated 50,000 industrial machines and installations. Until recently these figures,

[57] NIOD, 93 B4: Tätigkeitsbericht der ZAST für Mai und Juni 1942. Den Haag den 15. Juli 1942 and Tätigkeitsbericht der ZAST für Juni und Juli 1944. Den Haag den 28. August 1942.

[58] Klemann, *Nederland 1938–1948*, 77.

[59] Overy, *War and Economy*, *passim*.

[60] Klemann, *Nederland 1938–1948*, 438.

[61] Trip, *De Duitsche bezetting van Nederland*, *passim*; 'Uittreksel uit het memorandum van de Nederlandse regering nopens haar schadevergoedingseisen jegens Duitsland', 326–7; Klemann, *Nederland 1938–1948*, 438.

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published in 1947 by the Ministry of Economics, were seen as an indication of the dramatic plundering of industrial capital. Nobody realised that extent of the loss of these machines, which included such items as typewriters (2,018), sewing machines (2,375) and electric motors of unknown size (18,098),[62] although apparently impressive, was of little importance in comparison with the size of the economy.[63] For instance, the machine industry lost thirty complete factory installations, but there were 8,500 Dutch machine factories and there is no indication that those lost were the more important ones. That 0.5 per cent lost their plant while a further 2 per cent lost parts of them (although it is unclear which parts) could hardly be disastrous.

That confiscations were accentuated in the historiography is partly a consequence of the Hunger Winter of 1944–5, although one finds the same emphasis elsewhere in Europe. In September 1944 Dutch Rail went on strike in support of the British attack on Arnhem. Operation Market Garden was planned to secure a series of bridges over the key waterways, including the Rhine, but resulted in the last great Allied military disaster of the war. The failure of Operation Market Garden left large sections of the Netherlands under German occupation and from that moment onwards not only rail transport but also water traffic became almost impossible. Following the rail strike the Germans took revenge by prohibiting navigation, and boats were confiscated by the German navy. In addition there was a lack of coal and fear of air attacks, and several weeks' heavy frost resulted in the urbanised western part of the country being cut off from almost every type of supply for a period of nine months. People were starving and cold, factories closed due to lack of fuel and raw materials, and electricity, gas and water supplies broke down. Because normal society broke down, rumours became the only source of information. When the rumours circulated that the (now deeply hated) Germans were plundering the factories that were badly needed for post-war recovery, this was exactly what most people thought the enemy would do and therefore were ready to believe. And, indeed, the Hoek machine factory, a company with a 1944 balance sheet total of 4 million guilders, lost machinery and inventory worth 1.2 million guilders. It seemed to prove that 'the Germans were taking away everything'. In fact, Hoek was simply unlucky.[64] German confiscations were limited, and were focused on those branches with high wartime investments. After the war, when the government ordered an inventory of the confiscations, Germany's wartime investment in the Dutch industry was overlooked.

While destruction was documented in every history book, investments (probably not unimportant in western Europe) were forgotten. Because of the Dutch boom of 1940–1 (a period when private companies could still buy machinery or build factories), investments were probably more important than elsewhere in occupied Europe, but the first wartime investments had little to do with orders or booming business. Just as in the First World War, the Allied blockade of Germany stimulated

[62] *Roof, restitutie, reparatie. Samengesteld in opdracht van het Ministerie van Economische Zaken* (The Hague: SDU, 1947), 122–3; De Jong, *Het Koninkrijk der Nederlanden in de Tweede Wereldoorlog*, Xb, 74.
[63] Klemann, *Nederland 1938–1948*, 289 ff.
[64] Hoek's N. V., *Jaarverslagen*, 1938–1948.

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the production of import substitutes. One of the first Dutch investments, only a month after the German invasion, was by Gembo, a factory producing writing ink that started to produce printing ink, previously imported from Britain. In that same period the collapse of jute imports for bag-making led to investments in a paper-bag factory, while for substitution reasons the production of artificial silk and synthetic wool, chemical products based on salt (especially fertilisers), synthetic rubber, lignite, peak and earthenware were all either initiated or increased. Further, there were investments in tinned food production (imports of which were lost), and directly after the bombardment of Rotterdam the increased demand for furniture stimulated investments in this sector. Throughout the war the demand for furniture remained high in Germany on account of the destruction wrought by the Allied bombing. In the first years of the occupation Dutch industry already exported hundreds of thousands of cots and cradles; this was caused by the removal of monetary restrictions and the opening of the German market. The fact that, as a result, relations with non-occupied countries were hindered for monetary reasons (and trade with, for instance, Sweden waned) resulted in even more investments, such as in the production of matches. Further, in 1940 or 1941 the production of toothpaste, farm machinery and their spare parts, synthetic paint, carbide, beer, milk chocolate, earthenware and so on were either begun or increased in order to replace imports.

In the clothing industry investments were motivated not only by the need for import substitution but also by a rise in German orders. This was particularly the case with machine production, although the home market was also buoyant during the first years of the occupation. As in the chemical and metal industries, the growth of shipyards was almost completely driven by German military orders. From 1941 onwards German orders became the only reason for legal investments. Building, or the production of machinery, was only allowed when necessary for war production.

The Speer era

According to Adam Tooze, the character of the transformation at the top of the German war economy was different from what many historians have assumed until now. He makes it clear that it was not Albert Speer alone who was responsible for the changes. His predecessor as Reich minister of munitions, Fritz Todt, or the *Reichswerke* director Paul Pleiger prepared the changes that Speer later claimed as his own, while the actual policy after 1942 was for an important part at least to be carried out by men such as Air Force Marshall Milch or Gauleiter Fritz Sauckel, who was responsible for finding labour.[65] Nevertheless, when Albert Speer took over control of the German war economy in 1942 and together with Milch and others organised a *Zentrale Planung* (a central plan), this resulted in a new situation for the Netherlands and other occupied countries. In Germany the new policy managed to increase factory productivity and to stimulate industry to use raw materials more efficiently, although probably not as spectacularly as was thought until recently; in the occupied territories it systemised

[65] Tooze, *Wages of Destruction*, 486 ff.

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exploitation. The reason for the German change in policy was that, although the Axis powers had so far won every battle, its enemies' potential was growing.[66] Not only had Britain refused to be cowed into submission, but in the winter of 1941–2 the Red Army (by now written off) proved capable of mounting counter-attacks and Japan's attack on Pearl Harbor had brought the United States (already the arsenal of democracy) fully into the war. From now on the economic power of the Allies was much greater than that of the Axis. It was therefore clear that Germany would have to mobilise all its resources to win the war.[67] Speer was given the responsibility of implementing economic reorganisation, elementary standardisation and efficiency programmes.[68] Speer's planning went together with a ham-fisted attempt by Sauckel to mobilise the labour capacity of the continent, now that Germany's own population was increasingly required at the front. Although Speer deprecated this policy, he had to accept Sauckel as a concession to the party. Consequently, from 1942 the western occupied countries were exploited in an increasingly destructive fashion. While the occupier was before this date satisfied with more or less substantial parts of national output without real payment (in 1941 in the Netherlands, 19 per cent), from 1942 confiscations from the declining level of production increased to 40 per cent; this decline was caused by the occupier no longer being satisfied with taking output and also laying claim to the means of production. Starting in 1942, Berlin press-ganged labour for work in Germany and applied force whenever the victims refused to co-operate.[69] In the Netherlands the Germans tried to collect several hundred thousand men. In 1942 and 1943 about 120,000 workers a year actually left for Germany.[70] Because around that time about 550,000 (25 per cent of the labour force) can no longer be found in the labour statistics, it must be assumed that another 300,000 went into hiding. In an attempt to find enough labourers to man the remaining productive sector of the economy in 1943, working hours were increased from an average of 48 hours per week to 53 hours per week. The result was a dramatic decline in productivity.[71] Apart from this destructive labour policy, the Reich took control of raw materials – and reserved most of these for military use – while throughout Europe it prohibited investments and civilian construction. In reaction to this destructive policy and the resulting impoverishment, but primarily because of the threat to almost every family posed by this labour policy, resistance grew in importance.[72] During this period many Dutch companies (especially small ones) were closed and economic activities that were deemed unnecessary were prohibited. Moreover, German committees started to check on efficiency to establish whether

[66] Overy, *Why the Allies Won*, *passim*; Harrison, 'Economics of World War II', 1–42, 10.
[67] Overy, *War and Economy*, 353; Overy, *Why the Allies Won*, *passim*.
[68] Overy, *War and Economy*, 254; Alan S. Milward, *War, Economy and Society, 1939–1945* (London: Allen Lane, 1977), 115–16.
[69] Albert Speer, *Erinnerungen* (Frankfurt-am-Main: Ulstein Buch, 1976), 233.
[70] CBS, *Economische en sociale kroniek*, 301.
[71] De Jong, *De Nederlandse industrie*, 278 ff.; Klemann, '"Belangrijke gebeurtenissen vonden niet plaats . . ."', *passim*; See also Klemann, *Nederland 1938–1948*, ch. 12.
[72] De Jong, *Het Koninkrijk der Nederlanden in de Tweede Wereldoorlog*, 6, 87; See: Dirk Luyten, 'Stakingen in Nederland en België, 1940–1941', *Bijdragen tot de Eigentijdse Geschiedenis*, 15 (2005), 149–75.

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companies could transfer workers to Germany. In 1942 the ZAST even ordered the closure of companies that were not working for at least 50 per cent for the German war effort.[73] Now all companies were required to present a production plan which was to correspond with German industrial requirements.[74] German officials increasingly intervened in the Dutch economy. Dutch officials responded with appeals to the *Reichskommissariat*,[75] where they were met with sympathy by German officials who were being side-tracked themselves. Nevertheless, even during these years investments did not stop.

Investments in the later years of the war

In 1942 and 1943 about 300,000 teenage boys and young men went into hiding.[76] To help them earn some money and to prevent them from behaving irresponsibly because of boredom (putting themselves and others in danger), the resistance tried to organise work for them. This resulted in an illegal labour market.[77] Most work was found in agriculture, but all kinds of illegal shops and small factories were also started. The majority were hardly of economic relevance (hand-spinning, making tiles with Orangist texts, or sandals from straw), but some developed into a serious business. A good example was a village blacksmith working somewhere between Haarlem and Leiden who, when he could get no spare parts for American farm machinery, started to produce them himself. He solved technical problems by asking local resistance leaders to send him labourers from Amsterdam machine factories who were hiding out in the countryside. With their technical expertise this smithy developed into a farm machinery factory that still exists today.[78]

From September 1943 Speer changed his policy. He was aware that in the western part of the continent the policy of enforced labour was counterproductive. It increased animosity and resulted in enormous losses of labour for the local economy, of which only a minority went to Germany. In France, with over a million people in hiding, Speer was forced to compromise and in an agreement with the Vichy-French minister Jean Bichelonne, he agreed to stop hunting workers down and instead to transfer military production back to Germany, concentrating civilian production in occupied France.[79] The Speer–Bichelonne agreement of September 1943 was also implemented in Belgium and the Netherlands, thus ending the *Arbeitseinsatz* in western Europe. From September 1943 onwards the Germans in the western occupied countries tried

[73] NIOD, 93 inv. nr. B4: Tätigkeitsbericht der ZAST für September und Oktober 1942. Den Haag, den 15. November 1942.

[74] NIOD, 93, B4: Tätigkeitsbericht der ZAST für Januar und Februar 1943. Den Haag den 15. März 1943.

[75] NIOD, Doc I, 1080: Mijn beleid tijdens de Duitsche bezetting van Nederland, Ir. S.L. Louwes.

[76] Klemann, *Nederland 1938–1948*, 275.

[77] Only young men hiding from the *Arbeitseinsatz* had to work. Jews were not even allowed to work. For them and their hosts every activity was too dangerous.

[78] Cor van Stam, *Wacht binnen de dijken. Verzet in en om de Haarlemmermeer* (Haarlem: De Toorts, 1986), 28–9; R. Stokvis, *Ondernemers en industriële verhoudingen. Een onderneming in regionaal verband (1945–1985)* (Assen: Van Gorkum, 1989), 36.

[79] Radtke Delacor, 'La place des commandes Allemandes à l'industrie Française',19.

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Table 2. *Machine capacity in Dutch industry, 1938–1946*

Sector	Horsepower (x 1,000)							Percentage increase 1939–46
	1938	1939	1940	1941	1942	1943	1946	
Earthenware, glass etc.	74	76	76	80	81	81	81	10
Soap	6	6	7	7	7	7	8	29
Clothing	5	6	6	6	6	6	6	10
Leather, shoes etc.	23	23	25	27	25	22	28	20
Metal	266	284	294	320	332	342	380	45
Paper	163	172	175	175	179	182	187	15
Textiles	220	225	234	250	259	256	272	24
Food processing	66	68	70	71	74	78	84	27

Sources: CBS, *Jaarcijfers voor Nederland 1943–1946* (Utrecht: 1948), 166 ff.; J. L. van Zanden and R. T. Griffiths, *Economische geschiedenis van Nederland in de 20e eeuw* (Utrecht: Het Spectrum, 1989).

to make labour useful by placing civil orders with local industry, despite the fact that in Germany civilian production remained prohibited.[80] Objections from German businessmen that this would harm their post-war competitive strength were ignored. Consequently, in the occupied countries civil production was stimulated, resulting in new investments. In the Netherlands production started of mortar, agricultural lime, rock wool, slag wool, benzyl, dentures, wall-board, carbon paper, toys, picture frames, tools, combs, medical instruments, vitamins, cellophane and batteries.[81]

Investments in wartime

Of all the occupied west European countries, it is only possible for the Netherlands to prove that (notwithstanding destruction and confiscations) between 1939 and 1946 industrial capacity grew. Table 2 shows the machine capacity in every sector for which information is available. Capacity grew in every sector, with the exception of shoe production. As that sector did not use imported materials, clandestine production was probably extremely high. There was an important black market in skins and leather, resulting from the half a million cows and three million pigs illegally butchered between 1940 and 1945,[82] and as the sector had small economies of scale and high black-market prices it was possible for a shoemaker to increase his income by leaving the strictly controlled factories and going underground by starting an illegal workshop. Important parts of production were transferred to such shops.[83]

[80] NIOD, 93 B4: Tätigkeitsbericht der ZAST für September und October 1943, Dezember 1943.

[81] J. A. Freseman Gratama, 'Het herstel en de ontwikkelingsmogelijkheden van onzen industrie', *Economisch-Statistische Berichten*, 24 April 1946, 263–5.

[82] Trienekens, *Tussen ons volk en de honger*, *passim*.

[83] A. J. van der Leeuw, *Huiden en leder, 1939–1945. Bijdrage tot de economische geschiedenis van Nederland in de Tweede Wereldoorlog* (The Hague: Martinus Nijhoff, 1954), 235; Klemann, *Nederland 1938–1948*, 253 ff.

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Consequently, investments were made in them that never found their way into the statistical data.

Comparing 1939 and 1946 (Table 2) gives the best impression of wartime investments. Growing mistrust in the CBS resulted in incomplete information for 1943, but it is clear that between 1943 and 1945 regulation prevented investments. Therefore after 1943 industrial capacity can hardly have grown. There was also little investment after the liberation. Machine production was limited, and the small amount of hard currency available was used to buy food and raw materials. Consequently, between 1939 and 1943 industrial machine capacity grew by about 29 per cent. Of course, investments were not limited to horsepower, but it is the only indication there is of the size of investments in any occupied country during the war.[84] The greatest increase in horsepower – 43 per cent – is found in metals, suggesting that most investments resulted from the adaptation of industry to German needs. After the war this was a good reason to forget about it as quickly as possible.

In western Europe the damage caused to the economy by the German occupation remained limited, and in the Netherlands industrial investment was the more important development during the wartime period. Of course some companies did suffer severely, but in most cases war damage was limited to delays in repairs and replacements, and the complete loss of stocks of raw materials. That the Netherlands was not unique in this respect becomes clear from a French example. In that country, where very little quantitative economic historical research about this period has been done, and where black markets were extensive, it is difficult to establish how severe the situation really was. Nevertheless, as early as January 1946 it became clear that the economic damage caused by the Germans was not as great as was originally thought, when bankers and industrial leaders said that 'the French industry [was] about 80 per cent intact, despite war damage, bombing, and confiscation of machinery by the Germans'.[85] The Dutch case shows that it is important to ask which 80 per cent of which industry remained intact – the 1939 or the early 1944 industry – and, critically, what level of investment was made in between. That it will be difficult to find the answers is clear from the fact that in France (according to recent research) as much as 15 per cent of German purchases were made on the black markets.[86] Major parts of wartime production were never registered. Nevertheless, a year after the liberation it was clear that in the largest occupied west European country, the material damage to industry was much smaller than had been thought directly after the liberation, and that lack of fuels and raw materials were the main problems encountered by French businesses. When a Dutch official said the country was 'empty', he was right in that it lacked fuel and raw materials, the population was cold and hungry

[84] Klemann, *Nederland 1938–1948*, 284.

[85] J. F. Bell, 'Problems of Economic Reconstruction in France', *Economic Geography*, 22 (January 1946), 54–66, 62.

[86] Paul W. Sanders, 'Prélèvement économique, les activités allemandes de marché noir en France 1940–1943', in Dard, Daumas and Marcot, eds., *L'occupation l'état Français et les entreprises*, 37–67, 41–2.

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and industrial production had broken down, but industry and agriculture were not severely damaged.[87]

In 1945 the war damage in western Europe was not primarily physical. Industrial capacity was still there, and all over western Europe industry could start production again when the raw materials became available. However, in order to obtain these and to restart production, two enormous problems needed to be solved. First, there was the currency problem: to get raw materials these countries needed hard currency, and this they could only acquire through export sales. However, countries that could pay in hard currency were not interested in their products, while neighbouring countries that did need the goods had no hard currency to hand. The second problem was Germany: Europe was liberated, but for the central economy of the continent and its most important industrialised country (the country where all transport lines came together) there began a period of occupation. Germany was split into occupation zones and, for political reasons, was almost completely isolated from the rest of Europe. Western Europe could only really recover when these problems were solved.

Conclusion

After the war the picture emerged of the terrible fate that had befallen the Netherlands during the German occupation. Plunder and destruction, limited only by its isolation, had reduced the country to poverty and hunger. The research presented here shows that this picture is in need of substantial revision. A terrible situation did develop in the western parts of the country, which remained occupied during the last few months of the war, but even here industry (and agriculture) was not destroyed. For the country as a whole the picture of general destruction is wide of the mark. On the contrary, in 1945 industrial capacity was larger than in 1940. The fact that already in 1947 Dutch industrial production outstripped the 1939 figures was a result of investments made during the early war years. In 1940 and 1941 Dutch industry had its first good economic years since the start of the Depression. Growth was mainly caused by two developments. Firstly, immediately after occupying the Netherlands the Germans placed huge orders with Dutch industries which the Dutch (businesses as well as officials) were only too pleased to accept. Consequently, in these years and throughout much of 1942 industrial investment was significant. The fact that Dutch industry received so many orders was mainly due to the fact that Göring knew little about how to exploit the country and that Seyss-Inquart had as his first priority the task of resolving the social plague of unemployment, a view shared by his Dutch collaborators. In June 1940 Dutch public servants (whose ministers had gone into exile) were confronted with rates of unemployment that were unprecedented, even by the standards of the Depression years. The fear that the unemployed would be sent to Germany gave top priority to solving this problem. The remarkable result was that in 1940 and 1941, Dutch industry actually grew.

[87] Bell, 'Problems of Economic Reconstruction in France'.

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From 1942 on the changing situation in Germany resulted in a more systematic exploitation. Dutch industry had to come to terms with Speer and his planning. Decisions about the economy were transferred from The Hague to Berlin. The new policy resulted in a doubling of that part of production taken by the Germans, as well as a fall in industrial production to below pre-war levels. This was primarily a consequence of the hunt for labour and strict regulation of the use of raw materials. Although the Dutch were now forced into poverty, during 1940 and 1941 the Dutch economy seemed better off than it had been for years.

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