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1940-1945**

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This is the author's final, accepted and refereed manuscript to the article published in

***Scandinavian Journal of History*, 38(2013)4: 502-524**

DOI: <http://dx.doi.org/10.1080/03468755.2013.818787>

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Harald Espeli:

## ECONOMIC CONSEQUENCES OF THE GERMAN OCCUPATION OF NORWAY, 1940-1945

*Since the liberation of German occupation 1940-45 an important national narrative has been the far-reaching exploitation and destruction of the Norwegian economy by the occupant. The scholarly basis for this narrative was a book written by Odd Aukrust and Petter Jacob Bjerke in 1945. The narrative formed an important basis for the Norwegian variant of economic reconstruction following liberation and has also dominated historiography. However Aukrust and Bjerke's presentation of the bleak situation in 1945 was exaggerated and is, historically speaking, untenable. Another conclusion is that the German occupation initiated a twenty-year period in which the Norwegian economy was less open and exposed to internal and external competition than in any other period subsequent to Norway entering the liberal age of free trade and free international capital transactions in the middle of the nineteenth century.*

**Keywords:** Norway, World War II, German occupation, economic governance, economic regulation, war costs and damages

The German attack on 9 April 1940 and the following occupation of the country until May 1945 represent a watershed in Norwegian history and its national self-understanding. The basic national narrative of the Second World War is personified in two characters, King Haakon VII, symbolising national resistance, the constitutional state and democratic values; and the leader of the Nazi party (Nasjonal Samling) Vidkun Quisling, representing the epitome of collaboration and treason. The extensive economic cooperation and accommodation, not infrequently crossing the borders to collaboration, of Norwegian authorities, businesses and workers from the early days of the occupation have been largely omitted from the national narrative dominated by resistance. Resistance was primarily directed against the political Nazification attempts by the Quisling regime. Seen from a German military perspective this resistance was of minor importance next to the benefits of the economic cooperation of many Norwegians, although the tendency to work slowly on jobs associated with the German military increased significantly, especially during the last two years of the occupation. The scope of the economic cooperation is important in explaining the fact that Norway fared comparatively well economically during the occupation – although less so than Denmark which acquiesced immediately to the German demands on 9 April 1940.<sup>1</sup>

Another important national narrative, linked to the immediate post-war period, was the far-reaching exploitation and destruction of the Norwegian economy by the German occupant. This narrative formed an important basis for the Norwegian variant of economic

reconstruction following liberation.<sup>2</sup> This was characterised by prolonged, comprehensive and detail-oriented economic regulations. The scholarly basis for this narrative was first created by Odd Aukrust and Petter Jacob Bjerke's book *Hva krigen kostet Norge* (What the war cost Norway) published in the summer of 1945. This is the most politically influential book written by Norwegian economists in the twentieth century. Bjerke was then working in Statistics Norway, thus giving the book an official and authoritative status, helping it achieve its dominant status in the historiography.<sup>3</sup>

Both became influential economists in the post-war period, mainly working in Statistics Norway. They were key figures in national accounting as well as in economic planning and policy making into the 1970s. Bjerke was also Minister of Finance in the 1960-63 Labour government. Despite the fact that the country's quick recovery after liberation is not compatible with their image from 1945, neither of them - nor Statistics Norway - has revised their estimates of the occupation economy. Bjerke even opposed and denied the few scholarly attempts made in the mid-1980s to modify their gloomy picture of the Norwegian economy presented in 1945.<sup>4</sup>

The purpose of this paper is to analyse the immediate as well as the more long-term economic consequences of the German occupation, concentrating on politics and policies affecting economic developments. We will emphasise the direct effects on the economy, including changes in its productive capacities as well as the structural changes and economic policy and administrative path dependencies originating during the occupation and in the immediate post war period.

One conclusion is that Aukrust and Bjerke's presentation of the bleak situation in 1945 was exaggerated and is, historically speaking, untenable. Another conclusion is that the German occupation initiated a twenty-year period in which the Norwegian economy was less open and exposed to internal and external competition than in any other period subsequent to Norway entering the liberal age of free trade and free international capital transactions with a convertible currency in the middle of the nineteenth century. Because the protectionist impact of the 1930s was smaller in Norway than in most European countries the influence of the occupation and the immediate reconstruction period which followed had both a more prolonged and a more profound impact on the scope of governmental economic regulations than is usually stated in historical research on the period's economic policy.

The paper is structured as follows after a historiographic note. We start with the immediate effects of the occupation, followed by Norway's special role in the German war economy. Then we turn to aggregate and structural consequences of the occupation followed by a section on the regulation of prices, interest rates and currency transactions and a section on the new and prolonged regulation of agricultural markets as well as the new forms of wage and incomes policy.

### **A historiographic note**

Research that focuses explicitly on the immediate, short and longer term economic consequences of the German occupation of Norway is limited. There is no comprehensive work on the economic aspects of the occupation from a Norwegian perspective. The most comprehensive studies, both of which concentrate on Norway's role in the German war economy, are the ones by Alan S. Milward and Robert Bohn.<sup>5</sup> Research explicitly focusing on the economic aspects of the occupation has been limited. This is reflected in the presentations of the topic in the text books on Norwegian economic history in the twentieth century. Until 2002 these textbooks, with a few minor exceptions, adhered closely to the presentations given by Aukrust & Bjerve and Statistics Norway in 1945-46.<sup>6</sup> The only university economist dissenting from this presentation, Johan Vogt, seems to have been forgotten in subsequent research.<sup>7</sup> One explanation for this is that Vogt did not belong to the so-called Oslo-school of economics, the most prominent academics of which were Ragnar Frisch and Trygve Haavelmo. This school dominated economic thinking in Norway for decades after 1945.<sup>8</sup>

No transparent recalculation of national accounts and GDP between 1939 and 1946 has been made since the preliminary calculations made during and just after the occupation. These calculations can largely be called educated guesses, especially regarding the years from 1942. One of their main aims was to substantiate Norway's demand for large war reparations from Germany after liberation.<sup>9</sup> The assertion that German occupation resulted in a prolonged destruction of the Norwegian economy is difficult to square with the fact that the economy revived quickly in the post-war years. GDP measured in fixed prices surpassed the 1939-level as early as 1946 and GDP per capita in 1947 was higher than in 1939 according to existing national accounts. Even the huge real capital loss claimed had been replaced in 1948.<sup>10</sup>

On the other hand, a significant amount of research has been done on many aspects of the occupation economy from various other angles. That includes business and company histories, works on state utilities, histories of professions, unions and other interest organisations together with numerous works on regional and local history. The literature on economic development and especially economic and industrial policies in the post war period is vast. However, for a long time Norwegian historians were relatively disinterested in the short and longer term effects of the occupation economy. The same applies to the elements of continuity from the interwar period.<sup>11</sup>

In 1983 Olav Wichén started a reorientation in his study of the modernisation of manufacturing industries during the occupation, which included the rapid diffusion of electrical motors. A more comprehensive, but unobtrusive, critique of the narrative founded by Aukrust & Bjerve was made by Guri Hjeltnes in her contribution to the six-volume history on Norway during the Second War from the middle of the 1980s. She emphasised that the Germans not only exploited Norway but also invested significantly in infrastructure of prolonged civilian and military value, such as airfields and railway lines.<sup>12</sup> In the more general presentations of Norwegian history, there is quite extensive emphasis on the economic and social aspects of the occupation. The main focus on the wide-ranging German building activities that did away with the prolonged unemployment from the inter-war period and food scarcity that brought about a clear tendency towards equalisation of income and living standards between the urban areas and the countryside. Food scarcity and the resultant black markets also contributed to increasing conflicts on the commodity market, to use Stein Rokkan's concept, manifesting itself several times after liberation. In the newer presentations there is a tendency to combine Hjeltnes' perspectives and at the same time repeat the essence of Aukrust and Bjerve's narrative, adding a few critical comments to the latter, but without explicitly rejecting their core message of an economy that had suffered long-lasting damage.<sup>13</sup>

### **The immediate effects of the occupation**

In the occupied Oslo area Quisling's coup-d'état government from the evening 9 April proved to function against Hitler's goals in Norway. After negotiations between the self-appointed Norwegian representatives and German authorities, it was agreed that the Administrative Council (Administrasjonsrådet) would replace Quisling's government on 15 April. The principal aim of the Administrative Council was to restore social and economic stability as quickly as possible. This necessitated an understanding and close cooperation with the

occupying Germans. In the Administrative Council's declaration to the population in the occupied territories on 15 April 1940, the key passage was the following: "... everyone must exhibit calmness and self-restraint and at the same time contribute according to ability so that activity and work are kept functioning."<sup>14</sup> On the same day a public declaration to the population of the occupied Oslo area signed by elites of numerous occupations clarified the message further. People were urged to abstain from "*any kind* of action that could be considered sabotage or destruction" by the German military.<sup>15</sup>

To avoid high unemployment it was necessary for the Administrative Council to re-establish a functioning economy as quickly as possible, even if this implied extensive economic cooperation with the Germans and various forms of support to the German forces during the campaign. The first really important economic decision by the Council set a crucial precedent. The day after the Council's first brief meeting with the newly appointed Reichskommissar Joseph Terboven, to whom they promised loyal cooperation on 23 April, the Council, led by its minister of Finance, Gunnar Jahn, instructed Norges Bank (The Norwegian Central Bank) to give the Wehrmacht a blank cheque. Norges Bank obeyed. The Germans could thus finance their campaign and later occupation through withdrawals in Norges Bank. No explicit German demand, much less any order, related to this decision can be documented. The Council's voluntary decision can be explained as an explicit measure of cooperation and vote of confidence in Terboven, as well as the Wehrmacht, which enabled the council to continue its work. In this respect a rapidly increasing circulation of notes through German withdrawals was beneficial. This was the beginning of the occupation account in Norges Bank. By May 1945 the total German withdrawals amounted to 11341 million NOK.<sup>16</sup>

Considering the Council's instruction to Norges Bank on 24 April, its appointment on 3 May of the Committee for Industry and Trade (CIT- Nemnda for industri og omsetning) with extensive powers to set up mutual economic cooperation with Germany and German business was not a new form of cooperation close to collaboration, but a natural follow-up of existing forms of cooperation. By virtue of its members' background, CIT was a corporative body representing trade, industry and the Norwegian Federation of Trade Unions. On 5 May the Administrative Council, on CIT's initiative, decided that no business shutdown could take place without prior notice to CIT. CIT did much to legitimise economic collaboration with the Germans, even including direct efforts to obtain provisions from Germany to keep important industries important to the war effort going. In addition, CIT provided detailed information to

the Reichskommissariat about production capacities, stocks of raw materials and employment in numerous industries, including those most directly relevant to the war. This made it easier for the Germans to utilise and exploit the Norwegian economy for their own purposes.<sup>17</sup>

The Administrative Council set the example and precedent for close economic cooperation and accommodation with the Germans. It made no serious attempt to draw a distinct line between acceptable and unacceptable forms of cooperation and accommodation. On the contrary, one may conclude that its actions signalled that such a line could not be drawn if employment and profits were to remain acceptable. After Terboven replaced the Administrative Council by commissariat ministers on 25 September 1940 only one major organisation was created to promote and institutionalise economic cooperation and collaboration between the Norwegian business sector and Germany. The German Chamber of Commerce (Deutsche Handelskammer) was established in Oslo 19 November 1940. Its importance in terms of actual economic cooperation was probably smaller than that of the Administrative Council and its CIT.

Neither the Administrative Council nor business interest organisations advised business leaders to restrict their commercial activities with the Germans in any way. The contrast with the Belgian industrial elite on this point is dramatic. The memorandum of the Galopin-committee of 15 July 1940 argued that industrial production should be restricted to 60 per cent of the pre-war level and making any extra profits was to be excluded. At least until spring 1941 most large industrial companies adhered to this policy.<sup>18</sup>

Assisted by the rapidly increasing German economic demands the Administrative Council was very successful in reviving the economy. Already by late summer 1940 unemployment was below the level of the late 1930s. Open unemployment has been calculated to have been 6.6 per cent in 1938 and 5.6 per cent in 1939.<sup>19</sup> By late autumn 1940 the effect of German orders of Norwegian goods and especially German building and construction works had created a booming economy. Open registered unemployment was in effect wiped out from late autumn 1940 to autumn 1944 with the exceptions of only the coldest winter months.<sup>20</sup> The summer of 1941 represented the peak of Norwegians working on German building and construction projects, between 150,000 and 175,000 individuals, representing about 15 per cent of the workforce. In Denmark by comparison this peak was reached in May 1944 with

close to 90,000 workers and clerks.<sup>21</sup> In February 1944, between 90,000 and 125,000 Norwegians were working on German building and construction projects.<sup>22</sup>

Another indication of the short-term effect of the occupation was the decline of heads of households receiving public poor relief. This had reached a historic maximum in the mid-1930s with more than 143,000 main characters or households. During 1940 poor relief increased significantly to almost 140,000 due to war damage and the economic standstill from April to July in many locations. In 1942 however, only about 63,000 main persons or households received poor relief. These were the lowest figures since the economic boom of 1919 and 1920.<sup>23</sup>

### **Norway's special role in the German war economy**

Norway's position in Germany's war financing system differed from that of other occupied countries in important ways. Norway experienced by far the largest direct occupation payments per capita.<sup>24</sup> This also seems to be the case if other contributions such as clearing arrangements are included. If we compare occupation payments with rough estimates of GDP the burden of occupation payments on the economy was fairly stable, probably around one third of GDP each year of the occupation.<sup>25</sup> This heavy financial burden reflected an occupation force that represented on average about ten per cent or more of the Norwegian population, which at the time was less than three million and enormous military related building activity. Following the British commando raids on the Norwegian coast in 1941 and as a result of Hitler's deep-seated concern that the Allied forces might invade Norway, the creation of Festung Norwegen moved to the centre of Hitler's strategic thinking.<sup>26</sup> This obliged Germany to bring more than 100,000 prisoners of war to the country in addition to other forms of slave labour as well as voluntary labour, increasing the workforce by up to 140,000 people.<sup>27</sup> All other occupied countries had a net export of voluntary and enforced labour to the Reich.

In addition, Norway was the only occupied country with surplus in the clearing accounts with the Reich.<sup>28</sup> There are two principal explanations to this. Germany continued to export coal and grains vital to the Norwegian economy, preventing hunger in the last year of the occupation. At this time, Norwegian exports to the Reich more or less collapsed. Moreover, large quantities of goods were sent to Norway outside the regular clearing system. These were



not registered as imports, and were used in the Wehrmacht's or Nordag's building activities as well as in the Wehrmacht's operational activities based in Norway.<sup>29</sup> Thus Norway probably experienced a significant import surplus from Germany and German-controlled areas during the occupation. All other occupied countries had export surpluses, often very substantial ones, with the Reich in their clearing accounts.

### **Aggregate economic consequences of the occupation**

The German military and civilian building and construction work, the bulk of which was financed by withdrawals from Norges Bank, was the driving force behind the booming economy in the first three years of the occupation, wiping out unemployment. Due to lack of raw materials and energy, economic activity slowed down increasingly from 1944 onwards, bringing large parts of the manufacturing industries to a virtual standstill by the time of liberation in 1945 with stocks close to zero. The withdrawals from the occupation account led to a dramatic increase in the money supply, close to 650 per cent, between March 1940 and May 1945, measured in M1, see also table 1.

Table 1 Monetary supply M0 and M1 and total net German withdrawals on the occupation account prior to (OCI) and after (OCII) state payments. In million NOK 1938- May 1945. Sources: (Eitrheim et.al. 2004), 229-230.<sup>30</sup>

	M0	M1	OCI	OCII
1938	596,0	594,1		
1939	690,4	723,5		
1940	1 506,7	1 728,7	1257	1 157,0
1941	2 276,8	2 691,9	3536	3 286,0
1942	2 972,6	3 630,3	5852	4 552,0
1943	3 909,4	4 433,9	8165	6 115,0
1944	4 414,8	4 994,3	10383	7 333,0
1945	4413,0	5376,0	11054	8 004,0

The Wehrmacht ruthlessly used the price mechanism to attract manpower and business to its building activities. However, through comprehensive and strict price regulation and price control in the rest of the economy, inflation was kept relatively moderate. According to the official wholesale price index, prices increased by 33 per cent in 1940; and by more than 60 per cent from 1939 to 1941. Wholesale price increases then slowed down, and in April 1945 prices were about 76 per cent above the average 1939-level. The increase in the official consumer

price index was significantly lower, 52 per cent since September 1939. The wholesale price index is considered the best indicator of domestic price developments during the occupation.<sup>31</sup>

The withdrawals on the occupation account, adjusted for German clearing refunds, constituted the largest single cost of the war. Other major costs included the value of German confiscations and requisitions without proper compensation from the Germans. These probably amounted to between 1.8 and two billion NOK in current prices.<sup>32</sup> In relation to war damage on private and municipal buildings, chattels and goods, reliable estimates exist because of the obligatory war insurance schemes established by the Administrative Council in 1940. These direct war damages, including compensation of damage and wear and tear to the owners of property the Germans had requisitioned, amounted to 2.5 billion NOK in 1946.<sup>33</sup>

About 50 percent of the merchant fleet was lost – ships under German control had the highest rate of losses due to allied attacks. Nortraship's payment of compensatory damages to the private ship owners amounted to 1.6 billion NOK.<sup>34</sup> The war-losses related to Nortraship were not included in the estimates done by Statistics Norway in 1945 and 1946 to substantiate Norway's demand for war reparations from Germany.<sup>35</sup> The largest and most controversial element in these estimates was the so-called real-capital losses which included everything from direct war damage on buildings to reduction in inventories of all sorts. However, due to extensive stock-piling, inventories were particularly large at the end of 1939 compared to the peacetime norm. Real-capital losses also included value reductions of households' chattels and movables as well as depreciation of ordinary real capital that could not be compensated by maintenance or investments.

Aukrust & Bjerve's and Statistical Norway's estimates of real-capital losses added up to 5.8 billion NOK in 1939-prices. Total war costs were estimated to be 17.5 billion NOK in 1939-prices. This included 4.6 billion NOK which represented the loss related to a two per cent reduced growth rate of GDP per year compared to 1939.<sup>36</sup> Thus Aukrust & Bjerve took it for granted that even if Norway had been able to remain non-belligerent GDP would have increased at about the same rate as in the second part of the 1930s. Aukrust & Bjerve's estimates of total costs were close to three times GDP in 1939. Until recently, Norwegian economic historians have accepted these estimates with few objections. However, the latest edition of the standard textbook of Norwegian economic history emphasises that assuming

that real capital reductions in manufacturing industries during the occupation were as substantial as asserted in 1945-46 is unreasonable.<sup>37</sup>

In a number of areas it is easy to document that the estimated capital losses were either unfounded or exaggerated. In addition to the reduction of stocks, one of the large loss items of the real capital accounts were personal chattels (shoes, clothes etc). These total losses were estimated to have been 1200 million NOK. However, with a few important exceptions, principally the people of Finnmark and northern Troms, there is no reason to believe that the lack of such belongings had any detrimental effect on the economic revival or the economic reconstruction more generally – to the contrary, in fact. In later versions of national accounting personal chattels were excluded from the (real) capital concept.<sup>38</sup>

One of the most central aspects of the war was not considered at all by Statistics Norway or Aukrust & Bjerve: human capital. Compared with all other European countries directly involved in the war, except Denmark and Czechoslovakia, direct war casualties were small, about 11000 fatalities in all: These included 4200 sailors, 2000 servicemen, 700 Jews and 850 Norwegians fighting under German command. Although reduced food imports forced rations down during the winter of 1944-45, Norway experienced no mass starvation such as the “Hunger Winter” in the Netherlands in the same period. The Reichskommissariat’s influence within the Reich and its ability to get food supplies to Norway in cooperation with the Quisling regime was fundamental. In addition the Germans permitted large scale humanitarian food aid from Denmark and Sweden, commencing in 1944. Thus the Norwegian population grew about four per cent during the occupation years to 3.1 million in 1945. Even the rough and extensive physical destruction of Finnmark and northern Troms in late autumn 1944, in order to stop the Soviet military advance, was effected with relatively small civilian casualties. Germany’s occupation of Norway was a mild one in a European context.

After liberation the government confiscated all German property in Norway. Aukrust & Bjerve explicitly excluded the value of confiscated German installations and equipment after liberation in their estimates, partly due to lack of data but also because German military plants could do more harm than good. The same was true for Statistics Norway and their later estimates.<sup>39</sup> There has been no attempt to make a comprehensive estimate of these values. The properties administered by the Directorate of Enemy Property were evaluated to about 300 million NOK. The valuation of the Directorate's properties appears to have been unreasonably

low, e.g. the Nordag plant in Årdal, in part to avoid the existence of German values in Norway undermining the country's demands for war reparation in Paris.<sup>40</sup> Property confiscated directly by the Norwegian national rail, the state telephone and telegraph monopoly, the Armed Forces as well as other forms of infrastructure (roads, harbours, airports) came in addition. A more reasonable estimate would be between one and two billion NOK in 1945-46 prices.

In this context it should be noted that after liberation Hans Clausen Korff, head of the department of public finance in the Reichskommissariat from the autumn of 1940, estimated that net German withdrawals on the occupation account of 11 billion NOK had been divided almost equally between ordinary daily expenses for the maintenance of military personnel investments in military as well as civilian infrastructure.<sup>41</sup>

A few examples of these investments will illustrate their long term economic value. Substantial investments in civilian infrastructure included a significant extension of the railway lines financed jointly by ordinary state budgets and the occupation account. These railway lines, with few exceptions, still form part of the Norwegian railway system. Substantial amounts of imported rolling stock came in addition.<sup>42</sup>

The most obvious examples of the economic advantages of the occupation can be found in telecommunications and airports/-bases. German military needs for reliable communication lines meant large teleprinter line investments in the old-fashioned and inadequate Norwegian telecommunications system, particularly along the main traffic lines. After liberation the state telephone and telegraph monopoly reduced the German teleprinter capacity by 50 per cent. This was, however, adequate for civilian traffic throughout the 1950s and this was the only part of the state telecommunications system that worked well in the post-war period, i.e. without long waiting lists or waiting times for trunk calls. The German military telecommunications system also formed the basis for the separate and independent Norwegian military telecommunications system formally established in 1953, a unique organisation among Western European countries.<sup>43</sup>

Most German-built or extended bases for the Luftwaffe became the basis for civilian or military airports built in the following years in Norway. The numerous German military barracks scattered around large parts of the country were to a very large extent utilised for

military and civilian purposes. Significant German investments in electricity power plants incomplete in May 1945 were finished relatively quickly after the war. Historian Lars Thue concludes that guiding principles of Germany's power policies had important consequences for the state's role as producer and regulator of power after the war.<sup>44</sup> The German investments in the unfinished but up to date aluminium plant in Årdal formed the basis for the state's direct involvement as an owner in this industry - which continues to the present. Another example is Norsk Cellulfabrikk Ltd., formally established on 25 September 1941 with Borregaard, the largest Norwegian company at the time, as the majority owner, while the German Phrix-group invested 25 per cent of share capital of 10 million NOK as well as supplying the technology of the staple fibre plant. The building of the factory was delayed but production started in 1946 with up-to-date technology.<sup>45</sup> The Germans were also responsible for the introduction of the frozen fish industry on a large scale.<sup>46</sup>

### **Other structural economic consequences of the occupation**

The occupation was characterised by economic modernisation, not least in terms of new infrastructure, as well as a tendency towards less efficient production methods and lower quality products. The latter was closely linked to the scarcity or absence of the usually used raw materials as well as imported finished products. This also led to the production of substitution products, often of low quality.<sup>47</sup> These so-called ashtray industries were characterised by small-scale production, often in new-established firms which were unable to compete when imports gradually revived in the late 1940s. In agriculture the shortage of food led to greater self-sufficiency or subsistence orientation at the household level. This even affected relatively large holdings, probably continuing to about 1950.<sup>48</sup> During the occupation, the goal of governmental regulation of agricultural production at the farm level was to increase the output of horticultural products at the expense of husbandry. Although farmers did not fully abide by these regulations, this change meant more labour-intensive production in summer time. At the same time the occupation and the higher wages paid by the Germans for work led to a decrease in agricultural employment until 1944. Then food shortages probably led to a small increase in the agricultural working force in the last part of the war. The overall effect of the occupation on sector employment was a significant increase in the secondary industries; however, this was temporarily halted from 1944. In contrast to the permanent unemployment of the inter war period, which had slowed down the transfer of labour from the primary industries, the booming economy from the summer of 1940 showed

that workers were willing to move long distances to earn a higher income.<sup>49</sup> Thus after liberation the flight from the countryside commenced immediately, despite the lack of urban housing.

In those economic sectors where the Germans had been an important or dominant customer, the tendency to go-slow had become an internalised routine by the time of liberation. Lower work efficiency compared to before the war continued to be a problem in some sectors for many years after, such as in the state telegraph and telephone monopoly.<sup>50</sup>

The combination of increasing incomes, depletion of stocks and few opportunities for large or long-term investment meant that sectors with high debt rates prior to the war, notably agricultural holdings, municipalities and fishermen, paid down their debts during the occupation. In addition, farmers and fishermen had significant surplus liquidity to invest in modern equipment and machines as soon as these became available in the reconstruction period. As soon as limited tractor imports started, farmers queued up to buy tractors, thus starting the rapid mechanisation of agriculture.<sup>51</sup> In manufacturing industries there was a significant modernisation effect linked to the large increase in electrical motors, enhancing production flexibility and efficiency. Other forms of innovation and incremental improvements have also been documented. After liberation, entrepreneurs relied on military-based technological developments such as sonar and radar when implementing innovations.<sup>52</sup>

On the question of division of labour according to gender the occupation reinforced tendencies brought about by the permanent unemployment of the interwar years. Then married women became housewives without an independent income to greater degree than previously. The impact of the near-absence of unemployment was overruled by the effect of the growing shortage of all kinds of consumer goods. The need to economise on scarce supplies of food and clothes made women's housework relatively more important for households. The contrast to women in Britain and America, where millions of women became workers in the manufacturing industries during the war is striking. Thus the development into the classical era of housewives of the 1950s, with less than ten percent of married women being employed outside the household, was seamless in Norway.<sup>53</sup>

## **Regulation of prices, rents, interest rates and currency transactions**

In a number of important areas of economic governance new policies were created during the war or immediately after liberation. We will concentrate on new economic regulations and policies of a prolonged nature, thus creating new political and institutional path dependencies, starting during the war. We begin with the regulation of prices and dividends.

Immediately after the outbreak of war in September 1939 the government passed a provisional decree banning any price increase until provisional price regulations had been established later in the same month. After the German attack in April 1940 the level of gross profits, measured in fixed NOK, not in relative terms, could not be increased without prior approval of the body regulating prices. On 12 September 1940 the Administrative Council reorganised this body into the Price Directorate, which was led by director Wilhelm Thagaard. The Price Directorate was given extensive autonomy and authority on all price regulation matters. None of its individual price decisions could be appealed to a supervisory body, such as the Ministry to which it belonged in administrative terms. That authority was not changed in the new Price Act of 1953. The only principal change in the enabling powers of the Price Directorate enacted during the rest of the occupation was the power to stop the establishment of new retail shops selling foodstuffs in 1942.<sup>54</sup>

The clearest indication that liberation would not bring an end to economic war regulations was the provisional decree enacted by the Nygaardsvold-government in London on 8 May 1945. This very controversial decree, labelled Lex Thagaard after its principal author, meant that the Price Directorate was to keep its wartime powers and autonomy also in peacetime. In addition, the Directorate was given the power to ban the establishment of new establishments, extend or close down production in existing firms in order to improve reconstruction or develop or make business more efficient. Thagaard and his Directorate could only be overruled by the Government in decisions dealing with restructuring of industries.<sup>55</sup> However, these extended provisions were not used until 1954. When the new Price Act commenced in 1954 large parts of the price regulation system from the occupation were dismantled – later than in most other democratic European countries, but only one year after Denmark. However, detailed price regulations on many consumer goods, particularly domestically-produced food products continued for decades.

Two other important elements of the price regulation system from the occupation period were also continued more or less unaltered after 1953. A maximum dividend that could be paid to

owners of limited companies was introduced with effect from 1940. The dividend ceiling was originally five to eight per cent of the nominal share capital.<sup>56</sup> After the war, dividends above six or seven per cent required the explicit approval of the Price Directorate. The Directorate was very restrictive in such matters. Dividend regulation was continued until 1960 when the Labour government acknowledged that it was not compatible with the free trading principles of EFTA and the need to attract direct foreign investments to Norway. The other element was the introduction of maximum rents following the occupation in 1940 on all buildings and flats built prior to 8 April 1940. In the post-war period, regulations were gradually relaxed in the sense that only buildings in the largest cities were included. In 2010, 70 years after its introduction, these regulations, the last from the occupation, were finally abolished.<sup>57</sup>

The regulation of rents from 1940 was intimately linked to the regulation of interest rates. The Administrative Council initiated the policy of low interest rate on 11 May 1940 with its imposed reduction of the discount rate from 4.5 to 3 percent. The reduction was the core of a crisis package to revive economic activity after the chaos created by the invasion. This was followed by more detailed regulations shortly afterwards to bring other interest rates into line.<sup>58</sup> Norges Bank had since its establishment in 1816 been solely responsible for the discount rate and its changes, the key instrument in monetary policy at the time. However, the really principal decision by the Administrative Council to subordinate the previously independent central bank to the Ministry of Finance was taken on April 24 1940 when the council instructed Norges Bank to give the Wehrmacht a blank cheque to its printing press. Thus the destruction of the traditionally independent central bank was executed by the Administrative Council's Minister of Finance, Gunnar Jahn, not the Germans. Ironically, Jahn succeeded Nicolai Rygg as Norges Bank's Governor in 1946.<sup>59</sup> That the subordinate position of Norges Bank in relation to the Ministry of Finance and the government proved to be very long-lasting obviously has other explanations.

The very expansive monetary policies created by the German withdrawal of 11 billion NOK on the occupation account not only created strong inflationary pressures but, together with the lack of investment opportunities in the private and public sectors, drove the level of interest rates down below the minimum level imposed by the Administrative Council in 1940. To keep most of the massive surplus liquidity as bank deposits or in other financial securities, the government sold long-term bonds and short term treasury bills to banks and insurance companies. Norges Bank planned a comprehensive monetary reconstruction after liberation,



but this was met by resistance not least from business interests who opposed the drastic single tax this would necessitate. Thus the plans for a comprehensive monetary reform in Norway failed and a large liquidity surplus demanded continued comprehensive price regulations in order to maintain price stability.<sup>60</sup> The other effect was that continued low interest rates could be achieved with moderate political intervention in the reconstruction period.

In January 1946 the Labour government nevertheless instructed Norges Bank to reduce the discount rate to 2.5 per cent, the lowest level ever at the time. This was the real beginning of the conscious low interest rate policy enjoying broad political backing in the post-war period. In 1945 Bjerve and Aukrust had argued that long-term interest rates should be reduced to 2.5 per cent by political and administrative means. Low interest rates would ease a swift reconstruction, keep rents and housing costs down, increase investment and make it easier to achieve full employment, a prime political goal after liberation.<sup>61</sup>

The occupation also created a new policy path in the field of exchange controls and capital transactions across borders. During the First World War no regulations on currency transactions as such were implemented. By way of contrast, a number of other European countries, including Denmark, which introduced comprehensive exchange controls from 1932 administered by Valutacentralen,<sup>62</sup> such regulations were neither considered necessary nor appropriate in Norway during the 1930s. Norges Bank successfully opposed governmental exchange controls. Its solution was to organise voluntary exchange controls through a new corporatist body (Bankenes Valutakomite). This system was not significantly changed during the “phoney war” of 1939-40, despite the large demand for currency created by stockpiling through imports by private and state actors. Governmental exchange controls were limited to the clearing agreements, principally with Germany from 1934-35.<sup>63</sup>

From May 1940 the Administrative Council under pressure from the Reichskommissariat introduced regulation of all currency transactions. The aim was to secure complete control of all Norway’s external economic relations for Germany. The continuation of such provisional controls after liberation was much less politically controversial than trade regulations. In 1950 currency regulation was given a new legal basis through a permanent and wide-ranging enabling act.<sup>64</sup>

## **New forms of income policy and regulation of markets**

Governmental regulation of wages 1940-1950 was originally imposed by the Administrative Council and the Reichskommissariat in 1940. After liberation it was replaced by an agreement among the Norwegian Confederation of Trade Unions, the Norwegian Employer's Association (NAF) and the Nygaardsvold government from 1944. Disagreement on wage changes was settled by compulsory arbitration until 1950. The 1944 agreement may be considered the beginning of a much more effective tripartite co-operation among these three agents.<sup>65</sup>

Another regulatory innovation from the war was the introduction of producer subsidies to maintain or increase milk production and at the same time keep consumer price increases as low as possible. In 1941 the Price Directorate proposed a national regulatory system on milk and all other dairy products to make nationwide consumer prices on dairy products as uniform as possible. The new powerful and complex national regulatory authority, Riksoppgjøret, under the auspices of the Union of National Milk Producers also included the establishment of an effective co-operative dairy monopoly, but which did not have any clear legal basis. Although under formal state supervision, it was not a body that could be controlled by the Quisling regime or the Reichskommissariat. The dairy monopoly and Riksoppgjøret were not dismantled but strengthened after liberation. This was because they were essential in maintaining consumer prices on dairy products uniform across the nation. They also played a key role in ensuring that increased milk prices for farmers were distributed fairly evenly geographically, regardless of farmers' location vis-à-vis urban centres. The monopoly of dairy co-operatives lasted without major changes until 1995, thus being one of the most important and long-lasting new regulations introduced during the occupation. Considering the status of the regulatory regime for milk producers and dairies, which were on the verge of collapsing prior to the German invasion due to the costly surplus production of milk and butter in the 1930s, the occupation could be characterised as a blessing in disguise for the dairy co-operatives and their owners.<sup>66</sup>

Dairy co-operatives were not the only political free riders of the war. Other sales co-operatives within agriculture, forestry and the fisheries were also given new or more privileged market status on a provisional basis. With the exception of the sales co-operatives within forestry their role as market regulators was transformed into a permanent one based on ordinary legislation after liberation and their roles were not significantly altered for more than 40 years. Despite the increased and more politically privileged role of agricultural sales co-

operatives, linked largely to husbandry production, the Labour government did not choose them as the representatives for Norwegian agriculture when establishing the new corporatist negotiating body which was to decide on levels of agricultural prices and subsidies in the reconstruction period. Instead, the Labour government opted for the unions of Norwegian smallholders and farmers.<sup>67</sup> Although this new corporatist institution developed after the occupation it is difficult to imagine that it would have come into being without it.

Shortly after the occupation most forms of commercial transport became strictly regulated due to fuel shortages. Local houses of call for lorry transport (transportentraler) were established, a kind of enforced cartel. Similar regulations were introduced for coastal shipping. After liberation, public control of all forms of commercial transport continued, albeit with slight changes. Licences for most forms of transport became necessary. Based on ideas of economic planning, the various licensing authorities were not to issue new concessions if they considered that the supply of existing license owners was sufficient. This regulatory system became permanent from 1947 and some of this system's elements continued into the 1990s.<sup>68</sup>

### **The increased importance of the state**

The policies discussed so far were mainly related to the regulating role of the state. The increased role of the state in the economy had other elements as well. The occupation led to significant tax increases, with effect into the post-war area. The increase of both direct and some indirect taxes, mainly the purchase tax, were dramatic. The purchase tax was increased from two to ten per cent by the Administrative Council in 1940.<sup>69</sup> The nominal company tax was almost doubled to 50 per cent of net taxable profits of firms, continuing to 1992. The moderate progressive taxation rates on personal income and wealth from the interwar period was drastically increased with lasting effect, particularly in relation to income. Thus from 1941 up to 90 per cent of taxable personal income could be paid in tax. However, in the post-war period the effective tax level gradually declined both for companies and individuals due to many new tax deductions. The capital gains tax could amount to 88 per cent.<sup>70</sup> Together with strict dividend regulations this created an effective locking in of capital in existing firms. The national taxation administration grew significantly during the occupation, making tax assessment in the municipalities more equal, but the Reichskommissariat's plans to introduce other major changes in the Norwegian taxation system proved futile.<sup>71</sup>

During the First World War the government had involved itself in numerous new industries and business areas. However, with few exceptions such as the Vaksdal flour mills acquired 1916-19 and the new import and sales monopoly of wine and liquor following the prohibition and the prolonged controversies related to the state monopoly on food grains, both being established in the 1920s, the government quickly retreated from its new business activities. The effects of the occupation were significantly greater in expanding state-owned business activity. Liberation meant that all German assets in Norway were confiscated. The most important of these was 44 per cent of the shares in the chemical company Norsk Hydro, which became the flagship of successful state ownership in the post-war period. Nordag's unfinished aluminium plant in Årdal became the foundation for direct state ownership in this industry lasting to the present. In addition there were a few large mining companies and numerous smaller ownerships which became longlasting.<sup>72</sup>

In contrast to e.g. France and Britain, few other major forms of nationalisation were carried out after the war. The prolonged process of nationalisation of the remaining private local telephone companies after the occupation (which was not brought to an end until 1974), represents a special case. The intensified nationalisation process in the reconstruction period reflected the fact that the state's telegraph and telephone administration utilised its greater independence during the occupation to alter the balance of power in the market to its own advantage, thus eroding the future basis for private local telephony in Norway.<sup>73</sup>

### **1940-1960: A more closed, cartelised and state-governed economy**

The protectionist tendencies of the interwar period had less influence in Norway than in most European countries, including traditionally free-trading Denmark.<sup>74</sup> Tariffs remained moderate or low, with the exception of traditional fiscal tariffs. Exchange regulations were few and mainly enacted as a response to state trading and clearing arrangements established by other countries. Import restrictions and state trading had limited scope and effect.<sup>75</sup> The same was probably true for technical trade barriers, but research on these is limited. Thus the German occupation and its extensive and detailed regulations of all aspects of the economy represented a more dramatic change than in many European economies. Norway suffered smaller direct war damage and human losses than most other European countries participating in the war. In Norway post 1945 regulations of the economy continued to emulate wartime economic regulation. This continued longer than in other OEEC-countries. Protectionism and

state control of the economy seems to have been more extensive in Finland than in Norway until the 1960s. However, Finland had to pay large war reparations to the Soviet Union and resettle ten per cent of its population after the war and was never a member of the OEEC.<sup>76</sup>

Norway, together with Denmark, Sweden and Britain, belonged to a group of countries in which the economies were regulated in a manner more akin to wartime regulation than in the other OEEC-countries in the first five to six years after the war. In this period the four countries were governed by Labour parties all or most of the time. With two major exceptions, it seems that the war-emulating regulations in Norway and Denmark did not differ greatly until the beginning of the 1950s. The exceptions were food rationing and the fact that Denmark never initiated a long-term policy of low interest rate as seen in Norway and Sweden after the war.<sup>77</sup>

In Norwegian historiography the traditional explanation for Norway's prolonged detailed regulation of the economy has been the Labour government and its new forms of planning which were, in turn, linked to the national budgets from 1947 inspired by Keynesian economists.<sup>78</sup> The argument in this paper is not to dismiss such explanations but to emphasise the importance of the experiences and administrative and institutional path dependencies from the occupation years much more strongly than has been done in previous research. Both the system of rationing and other forms of detailed economic regulations had been introduced and administered by un nazified Norwegian institutions, notably the Administrative Council and permanent key institutions such as the Price Directorate. With a few exceptions the system of rationing as well as other forms of detail-oriented regulations had functioned fairly well during the occupation and held significant public legitimacy that could be utilised after liberation.<sup>79</sup> In this context Aukrust & Bjerve's presentation of the alleged extensive German exploitation and destruction of the Norwegian economy was particularly important because seemingly politically unbiased economists legitimised a long-lasting continuation of the regulations which emulated those which existed during the war.

In the beginning of 1946 the Labour government made pragmatic concessions to secure the legitimacy of the rationing system. Rationing of tobacco and liquor were the first to end after

liberation. The reason was not that the government believed that these goods, largely provided through scarce foreign currency holdings, were particularly important to people during reconstruction, but that the regulation system as such would be undermined by the widespread black markets dealing in these products. The rationing of clothing and textiles continued until 1951 and for many foodstuffs until 1952.<sup>80</sup> The most prestigious symbol of the modern consumer society, private cars, were rationed until the autumn of 1960 in order to keep private consumption down and investment rates high. Larger business-related building activity was also in effect rationed until the beginning of the 1960s, because obtaining the necessary building materials without a building permit was impossible. These regulations of the building sector existed so as to secure that governmental investment priorities were implemented.

War experiences and the popular and political legitimacy of regulations emulating wartime conditions in peacetime were very different in France, Belgium and the Netherlands. In these countries the popular legitimacy of both rationing and regulations had been completely destroyed during occupation. Black markets were rampant and even significant parts of production in manufacturing industries were outside governmental control during the occupation, as in the Netherlands.<sup>81</sup>

The German occupation initiated a prolonged period of much more direct state regulations of the economy than previously. Norway is often characterised as a small, open economy. Particularly in the years 1940 to 1960 the openness suffered fundamental limitations. These restrictions were initially the result of externally imposed barriers to trade during the occupation. The legitimization of their prolonged continuation after liberation was to a significant degree due to the alleged long term destruction of the productive capacity of the economy during the occupation advocated by Aukrust and Bjerve and Statistics Norway in 1945-46. Behind these state restrictions to trade and competition formal and informal cartels prospered, creating business mentalities that paid lip service to the gospel of market competition rather than acting according to it.<sup>82</sup> The long term economic effect of those mentalities may very well have been more destructive for the long growth of the Norwegian economy than the direct effects of the German occupation.

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Private archive (PA) no. 951 Hans Claussen Korff

Norwegian National Archives (RA), Oslo.

S 1062 Ministry of Finance ( Finans- og tolldepartementets), Finanskontoret, Dca

Archive of the Auditor General of Norway (Riksrevisjonen)

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## Notes:

<sup>1</sup> The latest summary and analysis of the national narrative of the Second World War is Grimnes, 'Hvor står'. On the business elites, see Espeli, 'The German'.

<sup>2</sup> Cp. the memoirs of the prime minister from 1945, Gerhardsen, *Fellesskap i*, esp. 217 ff. and Gerhardsen, *Samarbeid*, 22 ff.

<sup>3</sup> Aukrust and Bjerve, *Hva krigen*. The official status of the book was underlined by the foreword by Gunnar Jahn, director of Statistics Norway. It is typical of the book's elevated status among Norwegian economists that no critical comments as to its perspective and analysis can be found in the most recent comment on the book by a prominent Norwegian economist, Bjerkholt, *Kunnskapens krav*, esp. 93, 98.

<sup>4</sup> Bjerkholt, *Kunnskapens krav*, 93 ff., Lie, *Ambisjon*, esp. 115-116, Bjerve, *Økonomisk*, esp. 56-57, Nordby, *Storting*, 68-70.

<sup>5</sup> Milward, *The Fascist*, Bohn, *Reichskommisariat*.

<sup>6</sup> Hodne and Grytten, *Norsk økonomi 1900-1990*, 170-171, Hodne and Grytten, *Norsk økonomi i det*, 177-178, Hodne, *Norges økonomiske*, Hoden, *The Norwegian*, Bergh, *Norsk økonomisk*, 19-20. See also Wasberg and Svendsen, *Industriens*, 225-231, Bergh and Hanisch, *Vitenskap*, 188 and Lange, *Samling*, 126-127.

<sup>7</sup> Vogt, *Vår økonomiske*, 11 ff.

<sup>8</sup> Bjerkholt, *Kunnskapens*.

<sup>9</sup> SSB, *NOS X. 102*, Christensen, *Vårt folks*, 478.

<sup>10</sup> Eitrheim et al., *Historical*, 279, Aukrust and et.al., *Norges økonomi*.

<sup>11</sup> E.g. Grønlie, *Norsk industripolitikk* and the numerous volumes he initiated describing and analysing research on post war history (Etterkrigshistorisk register), Tjelmeland, 'Hva krigen'. Hanisch et al., *Norsk økonomisk*, 137 ff.

<sup>12</sup> Wicken, 'Industrial', Hjeltnes, *Hverdagsliv*, 67-96. The increased installation of electrical motors had been noted earlier by Valen, *De tjente*, 30 ff.

<sup>13</sup> Hanisch and Lange, *Veien til*, 36-46, Furre, *Vårt hundreår*, 191-203, Lange, *Samling*, 107 ff, Bull, *Klassekamp*, 369-386, Bull, *Norge i*, 67-96, Rokkan, *Geography*.

<sup>14</sup> Administrasjonsrådet, *Bestemmelser*, 1-2.

<sup>15</sup> Didriksen, *Industrien*, 164.

<sup>16</sup> Espeli, 'Det gavner'.

<sup>17</sup> Espeli, 'The German occupation', 114-115.

<sup>18</sup> van der Wee and Verbreyt, *A small*, 135 ff.

<sup>19</sup> Grytten, 'Arbeidsledighetens', 272.

<sup>20</sup> SSB, *Statistisk-økonomisk*, 231, 277.

<sup>21</sup> Andersen, *De gjorde*, 372. His figures only include blue collar workers. I have added clerks and functionaries in the same proportion as in Norway.

<sup>22</sup> SSB, *Statistisk-økonomisk*, 218-223, 276-277, Tuveng, *Arbeidsløshet*, 124-137.

<sup>23</sup> SSB: *Statistiske meddelelser* 1942, 275-276, 1943, 154-155. Until 1944 persons entitled to poor relief had few reasons not to register. In 1944 persons receiving poor relief able to do hard physical labour might be forced to enlist in the "National work effort" introduced by the Quisling regime in 1943.

<sup>24</sup> Milward, *War, economy*, 138-148, Bohn, *Reichskommisariat*, 321-322, Mazower, *Hitler's*, 271, Klemann and Kudryashov, *Occupied*, 99.

<sup>25</sup> SSB, XII 163, SSB, *NOS X.102*, Vogt, *Skrifter*, Grytten, *The gross*, Norwegian National Archives (RA), PA 951, Korffs unpublished manuscript *Norwegens Wirtschaft im Malstrom der Okkupation Teil I*, 354 ff.

<sup>26</sup> Kjeldstadli, *Hjemmestyrkene*, 32-37, Vogt and Hartmann, *Akten*, esp. 50.

<sup>27</sup> Tjelmeland and Brochmann, *I globaliseringens*, 12, Soleim, *Sovjetiske*, 3, 56, 195, Skodvin, *Norsk historie*, 225, 235, Bohn, *Reichskommisariat*, 379.

<sup>28</sup> Klemann and Kudryashov, *Occupied*, 210, SSB, *Statistisk-økonomisk*, 113 ff.

<sup>29</sup> For an indication of the scope of this, see Kroener et al., *Germany*, 223.

<sup>30</sup> M0 is composed of total currency in circulation and demand deposits, excluding governmental deposits at Norges Bank. M1 includes governmental deposits at Norges Bank.

<sup>31</sup> SSB, *Statistisk-økonomisk*, 28-44.

<sup>32</sup> SSB, *NOS X. 102*, 164.

<sup>33</sup> Stortingsforhandlingene (Parliamentary Records, PR), St.meld.nr.55 (1957), 24.

<sup>34</sup> Hodne and Grytten, *Norsk økonomi 1900-1990*, 172-173.

<sup>35</sup> SSB, *NOS X. 102*, 158-159. The total Norwegian demand for war reparations from Germany amounted to 21 billion NOK at 1939-prices, Christensen, *Vårt folks*, 478.

- <sup>36</sup> Aukrust and Bjerve, *Hva krigen*, 41-49, SSB, *NOS X. 102*, 129-167.
- <sup>37</sup> Cf. Hodne and Grytten, *Norsk økonomi 1900-1990.*, 170-171, -Hodne and Grytten, *Norsk økonomi i det*, 142, 177-178.
- <sup>38</sup> See also Espeli, *De økonomiske*, 145-148.
- <sup>39</sup> Aukrust and Bjerve, *Hva krigen*, esp. 49, SSB, *Statistisk-økonomisk*, SSB, *NOS X. 102*.
- <sup>40</sup> PR, St.meld.nr.8 (1953), St.prp.nr.69 (1945-46).
- <sup>41</sup> Archive of the Auditor General of Norway, unsorted papers, Korff's P.M 5. July 1945 to Riksrevisor Lütken, Bohn, *Reichskommisariat*, 268-269.
- <sup>42</sup> Gulowsen and Ryggvik, *Jernbanen*, 11-60.
- <sup>43</sup> Espeli, *Norsk telekommunikasjonshistorie*.
- <sup>44</sup> Thue, *Statens*, 385.
- <sup>45</sup> Henden et al., *Globalisering*, 194-203, Sogner, *Skaperkraft*, 125-127, Bergh and Lange, *Foredlet virke*, 194-199, PR St.prp.nr.1 (1949) tillegg nr.1, *Norges Industri* 1941, 196, 234.
- <sup>46</sup> Andreassen, *Kjøle og*.
- <sup>47</sup> Johannessen, *Fiskeskinn*.
- <sup>48</sup> Slettan, *Bondesamfunn*, 14.
- <sup>49</sup> Espeli, *Fra hest*, 609-613.
- <sup>50</sup> Espeli, *Norsk telekommunikasjonshistorie*, 266, Bjørnhaug and Halvorsen, *Medlemsmakt*, 255.
- <sup>51</sup> Næss and Hovland, *Folkestyre*, 155-207, Espeli, *Fra hest*, 292-294.
- <sup>52</sup> Wicken, 'Industrial', Johannessen, 'Fiskeskinn', Sogner, *Skaperkraft*, 117-141, Sogner, *God på*, Amdam and Sogner, *Rik på*, 85 ff.
- <sup>53</sup> Blom and Sogner, *Med kjønnsperspektiv*, 345.
- <sup>54</sup> *Trustkontrollen* 1939, 279-285, 352-406, 1940, 63 ff, 227-258, *Pristidende* 1940, 41-49, 259-354, 1941, 764 ff, 1005 ff, 1942, 334-342, 606-610, 875-876, 1943, 209, Kili, *Den borgerlige*, 159-60.
- <sup>55</sup> *Norsk Lovtidende* (Londonutgaven) 1940-45, 483-502, esp. Section 2.
- <sup>56</sup> *Pristidende* 1941, 38-45, 1114-1123.
- <sup>57</sup> PR, Ot.prp.nr.82 (1997-98), sect.8.5.
- <sup>58</sup> Jahn et al., *Norges bank*, 316, Administrasjonsrådet, *Bestemmelser*, 70-71, Espeli, *Konkurransereguleringer*, 51 ff.
- <sup>59</sup> Espeli, 'Det gavner'.
- <sup>60</sup> Lie, 'Pengesaning'. In Belgium a swift and drastic monetary reform was enacted in October 1944, but it was not well prepared and the results were mixed, van der Wee and Verbreyt, *A small*, 425 ff.
- <sup>61</sup> Aukrust and Bjerve, *Hva krigen*, 248-260, Eitrheim et al., *Historical*, 124 ff.
- <sup>62</sup> Olsen and Hoffmeyer, *Dansk pengehistorie*, 162-212.
- <sup>63</sup> Rygg, *Norges Bank*, 465-470, 542-544, 622-623, Koefoed, *Den norske*, 121-125, 142, 178-181, Roll, *Bytte eller*.
- <sup>64</sup> Administrasjonsrådet, *Bestemmelser*, 48, 226-229, Lyng, *Veksten*, 114-116.
- <sup>65</sup> Halvorsen, *Jern og*, 28 ff, Administrasjonsrådet, *Bestemmelser*, 52-53, Bjørnhaug and Halvorsen, *Medlemsmakt*, 111-112, 273 ff., Bergh, *Storhetstid*, 133-151.
- <sup>66</sup> Espeli et al., *Melkens pris*, 60 ff, RA, S 1062, Dca box 196.
- <sup>67</sup> Espeli, *Landbruket under*, 75 ff, Lyng, *Veksten*, 187-205.
- <sup>68</sup> Administrasjonsrådet, *Bestemmelser*, 182-3, 217-220, 400-401, 409, Lyng, *Veksten*, 142-155.
- <sup>69</sup> Administrasjonsrådet, *Bestemmelser*, 155-157, 361-364.
- <sup>70</sup> *Norsk Lovtidende 2nen Avdeling* 1940, 250-253, 1941, 421-426, 1943, 146-156, Vidvei, 'Eit oversyn', Vidvei, 'Skatt til', Espeli, *Norsk telekommunikasjonshistorie*, 308.
- <sup>71</sup> Haugen, *På ære*, 144-151, Bohn, *Reichskommisariat*, 336-342.
- <sup>72</sup> Grønlie, *Statsdrift*.
- <sup>73</sup> Espeli, *Norsk telekommunikasjonshistorie*, ch.9.
- <sup>74</sup> Pedersen, *Danmarks*, 98 ff, 392 ff.
- <sup>75</sup> Fure, *Mellomkrigstid*, 149-179.
- <sup>76</sup> Paavonen, 'Finland'.
- <sup>77</sup> Boje and Kallestrup, *Marked*, 130 ff, Just, *Landbruket*, Pedersen, *Danmarks*, Wetterberg, *Money*, 323 ff.
- <sup>78</sup> One of the newest examples is Lie, *Norsk økonomisk*, 79 ff.
- <sup>79</sup> Also in this respect Norwegian policies and experiences were much closer to the Danish experience than that of other German-occupied countries, Christensen, 'Sortbørskriminalitet'.
- <sup>80</sup> Bull, *Norge i*, 65 ff. The British experience was much closer to Norway in this respect than continental countries, Zweiniger-Bargelowska, *Austerity*.
- <sup>81</sup> Taylor, *Between*, Klemann, 'Did the'.
- <sup>82</sup> Eg. Espeli, *Fra Thagaard*, 13 ff, Solli, *Krigsforsyninger*.

