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# **“The growth of two small economies in the Great Depression: GDP estimation for Cyprus and Malta during the interwar period (1921-1938)”**

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## **Abstract**

This article presents the major results of the first attempt to create historical national accounts for Cyprus and Malta. It constructs the first detailed estimates of output at aggregate and sector levels, enabling the analysis of economic growth and tracing structural change. The islands’ performance is evaluated within the context of wider economic change in Europe’s South Eastern periphery, suggesting that their economic growth was slow in comparison, despite both Cyprus and Malta being far less exposed to the political upheavals of the First World War. However, the ultimate reasons for their comparatively weak growth performance differed: Cyprus experienced a prolonged agricultural crisis, but participated in the post-depression recovery through the rapid expansion of the copper mining industry. Malta’s growth was slower than Cyprus due to the combination of declining British military expenditure and accelerated demographic growth.

These differences notwithstanding, the islands were ultimately affected by common problems. Their small overall size had a negative effect on their performance as global protectionism increased and restricted export opportunities. An important negative determinant for growth during the interwar period was their size, which in combination with the islands’ status as British colonies, made autarkic policies prohibitive.

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## **1. Introduction**

The economic history of Cyprus and Malta, especially during the tumultuous interwar period (1919-1939), has not been adequately researched. Historians have mostly focused on the islands’ political conflicts, while economists stayed from research due to the erroneous belief that there wasn’t available data prior to 1950. With the exception of Jenness, written as long ago as 1962, our knowledge of the islands’ economic history remains limited (Jenness, 1962). The new evidence presented below provides a fresh impetus to historical issues through the quantification of the economic conditions of the period (Maddison, 2001). This is

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important not only for the islands' histories as it contributes in the effects of the great depression in British colonial history since Cyprus and Malta (along with Gibraltar) were the last British colonies in Europe.

This article presents new quantitative evidence on the historical economic performance of Cyprus and Malta. In the typology suggested by Fenoaltea, this presents a first generation estimate of the historical accounts of both nations during the interwar period (1921-1938), indicating the first attempt in publishing aggregate production statistics (Fenoaltea, 2005). The construction of the first Gross Domestic Product (GDP) estimates based on HNA practices are subdivided into sectors and then industries for the period. The limited time period was necessary in order to provide data at the most disaggregated level possible and confirm the existence of sufficient data availability for reasonably robust estimates.

## **2. Data and Methods for Maltese and Cypriot GDP Estimation**

### **2.1 The Issues of Historical GDP Estimation in Cyprus and Malta**

Historical national accounts face issues of data availability and data quality; both tend to improve in subsequent attempts to revise GDP estimates. Thus there is a need to find a balance between methodological robustness and uniformity with what the underlying data quality allows a researcher to do. This is particularly true when the reliability of the data has not been previously examined as in the case of Malta and Cyprus. There was a focus in collecting and collating information within a national accounting framework in a transparent way, thus allowing subsequent revisions of output as more primary evidence becomes available.

None of the islands has a track record of historical national accounts creation from government institutions. The first Cypriot GDP was constructed for 1950 using the output approach, using information from censuses of employment, production and agriculture (Cyprus, 1951). The first GDP estimate for Malta was constructed in 1954 without using the output approach (Balogh, & Seers 1955). The adoption of SNA practices remained incomplete in Malta; GDP through the output approach has only been estimated from 2004 onwards. However there were some attempts in estimating income: Clark estimated that Malta and Cyprus were in different per capita income bands, with Malta being relatively wealthier (Clark, 1940)<sup>2</sup>. Maddison has estimated the joint GDP of Cyprus and Malta for the year 1929 in his 1995 publication (Maddison, 1995). The estimation procedure is also unclear and it would seem Maddison also believed the result was unreliable: the joint Malta/Cyprus remained part of Maddison's "non-sample" estimates which were not included in his estimates of global GDP (Maddison, 1995; p.224)<sup>3</sup>. In subsequent revisions of his work, Maddison has merged the joint estimate of Cyprus and Malta within a group estimate for "Small

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<sup>2</sup> Writing in 1940, Clark considered Malta's per capita income in the interwar period as comparable to Italy's, Finland's, Hungary's and Greece's. Cyprus was in the lower income band along with Turkey, Syria, Bulgaria, Romania and Albania

<sup>3</sup> Maddison's estimates seem to be based on the difference between the GDP level of Cyprus/Malta and the average GDP level of Ireland, Greece, Portugal and Spain for 1950.

Western European Countries”. This category contains a joint estimate for 13 European countries which are diverse in terms of economic structure, geographical location and growth performance as it includes Malta, Cyprus, Iceland, Andorra and Luxembourg (Maddison, 2010).

There have also been spot income estimates for Cyprus, but not using national accounts methodology. Without making his methods known, Fairfield estimated the total income of Cyprus in 1896 as £981,900 sterling, of which £176,000 was collected by the government through taxation (Georghallides 1979). Following a request by the legislative council, a committee was set up in 1930 to evaluate the tax burden of the population, which set up to estimate the total income of the island (Cyprus, 1930). Although the committee argued that “it is manifestly next to impossible in the absence of proper statistics to arrive at an accurate estimate” they nevertheless estimated the total income of 1927 as £3,500,000 Cyprus pounds which is 48% less than the estimate we present (Cyprus, 1930, para.6). Their underestimate is unsurprising as the members did not have the necessary knowledge to correctly define what constituted value added: sectors were omitted, double counting was not eliminated, and they did not differentiate between stock and flow concepts. Christodoulou also records an estimate of income as £2.8 million Cyprus pounds in 1930, 47% less than what is presented here (Christodoulou, 1992).

## **2.2 Methodology**

The focus of our attempt is to use this section to introduce the general challenges faced in the construction of first generation estimates for Cyprus and Malta, while refraining from extensive explanation of specific data and methodology issues, which are dealt in the Appendix. The current attempt to recreate GDP for the period 1921-1938 remains as close as possible on the current methodological standard used in the European Union, the European System of Accounts (ESA, 1995). Any deviation from best practice was due to data constraints; in such cases the general principles established in European Historical National Account (henceforth HNA) research were used as a guiding principle (Christensen, Hjerpe, & Krantz 1995). Value added estimates were calculated through the output approach and disaggregated to sub-industries, unless the data was extremely limited, where the value added of the sub-industries was estimated from the income side (Smits, 2006). Data was especially limited for the service sector. As a result the majority of the service sector value added (with the notable exception of transport, communications and banking industries) was estimated by multiplying service occupations in the census year by an annual wage and then log-linearly interpolated for the between-census years. As a result for those service industries where occupation was multiplied by wage, the reliability of the estimates are substantially reduced, as they were estimated on the operating assumptions of constant productivity and steady growth (Van Ark, 1995).

Output deflation can have a significant effect on GDP levels and growth rates (United Nations, 2003). The year 1938 is the benchmark year for the estimates due to the greater availability of both price and volume

data. Where direct physical volumes were available, their value was estimated by multiplying them directly with the price for 1938 prices as price data was very scarce for early years of the series. Where this was not possible, the current output was deflated to constant values using Laspeyres volume indexes with Paasche price indexes, with 1938 as the base year. Due to the lack of intermediate consumption prices, double deflation was not feasible as dictated by current best practice, which argues for a conversion of gross output and intermediate consumption to constant prices by two separate price deflators. Data scarcity limited the available price deflators used, with the exception of construction and communication where the consumer price index was used as a deflator.

The intermediate consumption was only estimated for the benchmark year of 1938 due to the relatively limited time span of the series. The resulting value added share per industry was then deemed to be constant in order to convert the output estimates to value added. The value added per industry was summed to obtain the total value added. Thus, the GDP can be subdivided into industries, according for the current NACE nomenclature used by the European Union. The GDP estimates as presented here are in constant factor prices of 1938.

The sources available vary from sector to sector. As a result, each industry necessitated different estimation procedures. In order to ensure comparability with other studies the procedures used were informed by HNA estimates of other Mediterranean countries such as Spain, Greece and Italy. A very brief indication of the scale and scope of the estimation procedure of each section is given below.

### **AG = Agriculture, Forestry and Fishing (NACE Code: A)**

The estimate of agricultural production was the most extensive in terms of products estimated and sources used. For Cyprus there were estimates of output for 85 products and 42 products in Malta. The products were grouped in 6 two-digit categories, which are sub-divided into 26 three-digit categories.

The time period used for the underlying Maltese agricultural data was corrected because some series represented the volume for an administrative year (from April to March) rather than a calendar year. In addition the primary sources of Cyprus did not provide enough farm-gate prices. A farm-gate price dataset was constructed by combining retail, export and import prices. The prices were adjusted in order to take account of the trade and transport margin and create a farm-gate price database for Cyprus<sup>4</sup>. This was checked with spot estimates of farm-gate prices, and found to be compatible. Some interpolation and extrapolation was necessary to fill in data gaps, while the animal products were estimated on the basis of the estimating procedure of Kostelenos, *et al* (2007), modified model for Maltese and Cypriot realities.

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<sup>4</sup> Source: National Archives, Nicosia. File: V53/26 “Gross Output and Inputs – Indirect Taxes and Value Added in the Agricultural Sector during the Period 1959–1968” Table 6

The output of forestry was estimated for Cyprus only as Malta was not forested. The forest cover of Cyprus was extensive, as 18% of the total land area was under the administration of the forestry department (Waterer, 1946). The forestry department was one of the first set up by the British administration, and as a result a substantial amount of quantitative information was provided by the forestry department reports.

### **MG = Mining and Quarrying (NACE Code: B)**

There was ample information on the volume and value of mining and quarrying exports in the statistical (blue) books; these were supplemented by information in the annual reports of the mining department in Cyprus. Only the output of sand in Cyprus and gravel and sand in Malta remain unaccounted for. The greatest concern was the lack of intermediate consumption data; as a result a fixed ratio of value added to total output was assumed after taking into account similar Mediterranean mines and post-WWII value added ratios (Ivanov 2009, Schulze 1997, Cyprus, 1951, Prados, 1993). Fenoaltea criticises the estimation of the value added based on the volume of ore extracted since the richness of the ore changes “from year to year, from batch to batch” (Fenoaltea, 2007). However there was insufficient information to estimate using his approach which needed the horsepower in use and operating profits of the companies.

### **MF = Manufacturing and Handicrafts (NACE Code: C)**

There were various data sources on manufacturing, but such sources were not necessarily compatible or complimentary. As a result the estimation of manufacturing varied from industry to industry in order to use the best data possible: some industries were estimated by the output approach, others using the expenditure approach and the handicraft sector was estimated by the income approach.

There was sufficient information for the largest industrial factories on the island. This allowed for an estimation of the value added of these industries from the output side. There was no information on the yearly change of stock in inputs making it necessary to assume that companies began and ended the accounting period with a constant level of inventories, and that all goods sold were manufactured on site. Output was estimated annually and value added was estimated by estimating the value added of 1938 and keeping the share of value added to output constant. The disadvantage of not estimating the yearly intermediate consumption is the assumption that no technological change took place in those industries in the period 1921-1938. However, there is simply not enough information to allow the annual calculation of intermediate consumption.

For smaller companies there was insufficient information available to provide estimates as above, but yearly output estimates were possible based on industrial inputs. A yearly value added estimate was extrapolated

from the benchmark year by assuming that the growth rate of these industries was similar to the average of the larger industries described above. Such industries constituted just 3.4% of the total manufacturing output in Cyprus yet they were important in Malta, where they constituted 25.6%.of manufacturing. The reliance on such methodology for Malta is due to the limited evidence of its manufacturing.

The output of the handicraft sector was also estimated. This sector was important as it provided complementary income to agricultural activities. Its output was estimated using occupation statistics based on the method of Jonsson for Iceland (Jonsson, 1999). Thus information was collected on employment and wages, in order to estimate the wage bill of the handicrafts industry. The handicrafts were divided into industries, and the total wage bill was converted to the value added in 1938 prices.

### **U = Electricity, Gas and Water Supply (NACE Codes: D & E)**

There was not enough information to estimate any private provision of utilities. This was problematic for Cyprus, where utilities were all provided by municipal authorities and private companies. As no information was available for utility industries in Cyprus, the production of utilities was estimated on the basis of post war national accounts as 2.5% of the combined manufacturing and trade output. In Malta, centralised data was available for utility provision in relevant government reports, allowing for estimates of output, intermediate consumption and value added<sup>5</sup>. The estimate of value added of Maltese utilities was calculated through summing the cost of production as government run utilities were non-market producers, charging less than the market prices (Lequiller, & Blades, 2006).

### **CT = Construction (NACE Code: F)**

In Malta there was annual information on the number of constructed houses and additions to existing houses in the annual report of the department of labour, with the 1938 report providing the average value of construction<sup>6</sup>. Agricultural buildings were also enumerated by the department of labour, but commercial construction was estimated by tracking the construction of urban and sub-urban dwellings.

Yearly construction data was not available for Cyprus, but the total stock of housing for 1921, 1931 and 1946 was known from the Cypriot censuses. Thus the total rural and urban houses constructed for the periods 1921-1931 and 1931-1946 was known. Modifying the method suggested by Prados (1993) the imports and the domestic production of construction materials were added to create a construction materials index, weighted by the 3 year average amount of material needed to construct a Cypriot house. The construction materials were summed and the yearly shares of construction were used to allocate the total houses

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<sup>5</sup> Source: National Archives, London. Files: CO161/120,121,122,123, 124 “Report of the Water and Electricity Department” 1921-1938

<sup>6</sup> Source: National Archives, London. File: CO161/123 “Report of the Commissioner for Labour for 1938-1939”

constructed during the periods 1921–1931 and 1931–1938. The construction of agricultural buildings was linked to the construction of rural dwellings, and the construction of commercial buildings was linked with the construction of urban dwellings. The value of building and the intermediate consumption of construction were estimated based on archive sources that included government housing initiatives for bureaucrats, agricultural building construction costs, as well as a report on rural development published in 1938<sup>7</sup>.

The value added of public construction was estimated using information provided by government expenditure, deflated by a price index of construction of materials. The share of value added to gross output was estimated for the benchmark year and assumed constant for the period: substantial information of the intermediate consumption of construction was collected by the reports on government housing and agricultural building mentioned above.

### **TTC = Trade, Transport and Communications (NACE Code: G, H, I)**

Trade output is estimated by comparing factory prices with retail prices, and multiplying the total tradable volume of goods with the trade mark-up (Lequiller, & Blades, 2006). The trade and transport margins were estimated using a combination of interwar sources and post-Second World War statistics. The estimation of trade was based on domestic trade, where the volumes of goods not used for subsistence farming were multiplied by the mark-up of trade and transport on the final price, while foreign trade was estimated on the basis of the volume of import and exports and the trade and transport mark-up on the final price. The proportion of intermediate consumption was estimated using post-Second World War data for Cyprus<sup>8</sup>.

The transport of railways and trams has been estimated based on passenger miles and freight traffic, but it was a very small part of transport output in either Cyprus or Malta. Other passenger traffic was estimated by creating a benchmark for 1938 on the relationship of passenger and goods traffic, and then an annual estimate was extrapolated by a transport index consisting of the yearly number of motor vehicles licensed in Malta and Cyprus.

Postal and telephone services on the islands were government controlled; thus ample information for the estimation of their value added was available from the annual reports of their departments. The postal services provided information that was used to estimate telegraph output. It was not possible to estimate the output of other communication services.

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<sup>7</sup> Source: National Archives, Nicosia. File: SA1415/1920/4, “PWD Cyprus–Proposed houses for Expatriate officers”; National Archives, London. File: CO69/45, Cyprus Administration reports 1938, Section 12 “Rural Development”.

<sup>8</sup> Source: National Archives, Nicosia. File: V53/26 “Gross Output and Inputs–Indirect Taxes and Value Added in the Agricultural Sector during the Period 1959 – 1968”



### **SF = Financial Services (NACE Code: K)**

The output of financial services from the output approach requires information on the total deposits of the banks, as well as on the base interest rate and bank lending rates. Such information was available for Cyprus in the Archives of the Ionian Bank but they were not available for Malta. The co-operative saving industries' output was estimated by evaluating its size relative to the retail banking sector in benchmark years. In Malta the only information available was occupational data. The output of the financial sector was estimated on the basis of the wage bill. No estimates of insurance output were possible for either island.

### **S = Other Services and Public Administration (Nace Code: I, M, N, O, P, Q, R, S, T, U)**

This category includes a diverse range of occupations. Despite the growing awareness of the services' importance in the development of economies, and hence the need to more accurately reflect their output in HNAs, it is difficult to estimate the direct output of such services (Broadberry & Sayanthan, 2002).

The government sector's value added was estimated by calculating the wages and pensions of government employees in current prices. The deflator was the Consumer Price Index (CPI) as there was insufficient price data to estimate a specific deflator for the government sector. The local government sector was not estimated. This is not a problem in Maltese GDP as local government did not exist prior to independence, but local government was established in Cyprus in the 1930s. Yet, the existing information on municipality expenditure does not distinguish between donations from the central government and local taxes. It was not possible to establish the share of the central government subsidy, which was considered to be a high proportion of local government expenditure; thus local government was excluded to avoid double counting. This is not considered serious as the Cyprus government was very centralized and thus local governments had a very small share of GDP.

Government doctors and teachers were not included in the government sector but in the relevant sectors of health and education. The value added of professional, entertainment and personal services was estimated using the occupational statistics provided by the censuses. The yearly number of practitioners was assumed to follow a linear growth rate from 1921-1931 and from 1931-1946 (1921-1948 for Malta). The yearly number of practitioners was multiplied by their wage in 1938. The wage level per profession was varied according to the number of men, women and apprentices as recorded by the census, and multiplied by a suitable wage according to their occupation, age and gender.

## **HI = Rental Income From Housing (NACE Code: L)**

Estimates of the value of the dwellings were made based on archival material. The housing stock of Cyprus and Malta was estimated decennially from 1851, and yearly for the period 1911-1960. The rental income had to account that house prices (and thus rental values) decrease with age, and the perpetual inventory method was used to depreciate housing at a constant rate according to its age (Meinen, *et al*, 1998), by estimating that the average lifetime of a house was 50 years. The proportion of yearly rental income was imputed using archival sources on the rents of government houses in Nicosia and of checks on buildings by the public works department in Malta; the implied value added from housing was estimated as a constant percentage of the housing stock value, creating different rent values for urban and rural buildings<sup>9</sup>. The share of rent to the total value was applied to the housing stock to estimate the implied rental income from housing for the period 1921-1938. However it was not a particularly significant share of GDP: the imputed rental income was less than 4% of the GDP for either Malta or Cyprus throughout the whole period.

The resulting GDP estimates provide an empirical base to structure our understanding of the living conditions on the islands during the interwar period as previous estimates of income have not clarified their economic performance. A structured and comprehensive estimation of GDP will provide the basis for detailed analysis of the islands' development. Using an extensive array of information from government sources, the quality of the data is judged to allow for relatively accurate estimates. By describing the methodology in detail, this thesis attempts to eliminate the ambiguities of past attempts with a clear, product-by-product analysis of the estimation procedure, making the estimates data fully transparent.

### **2.3 Data sources and reliability**

Hjerppe (1998) emphasises that the quality of HNAs relies primarily on the available data, but nevertheless an accurate picture of an economy can be created from historical sources which are far from perfect. For this study archival research was largely centred in the national archives of Cyprus, Malta and the United Kingdom, collecting data from published and unpublished reports and documents of the British colonial authorities of Malta and Cyprus. However the accuracy of such data sources was not clear and thus a survey of data quality was undertaken. Overall the survey of data quality indicated that the fact that the islands were small the quality is more than sufficient in order to estimate output; however more is known about the data quality in Cyprus rather than in Malta.

Data relevant to taxation is deemed as relatively reliable. The complicated taxation collection system in Cyprus produced substantial data, such as on land, yield, output and animal population, alcohol consumption and trade that were relatively reliable: Katsianounis cites that the accuracy of the figures resulted to the

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<sup>9</sup> Source: National Archives, Rabat. Public Works, File: PW534

arrears being just 1.4% of the expected taxation (1996). The small size of the islands made the collection of information less difficult than in other colonies, since the relative size of the Colonial bureaucracy was much larger relative to the area and population that they had to enumerate. As a result agricultural data, import, export, and government revenue and expenditure statistics are perhaps the most reliable data on the islands. Another important information source was the decennial census reports taken in Cyprus and Malta. The census results were particularly important in evaluating the occupational structure and the housing stock of the islands. The census taking methods in Malta were problematic if judged by current standards. The census questionnaire was provided to the head of every household who was expected to fill in a schedule left at his dwelling by an official administrator, and was subjected to a fine if he did not complete it. Literate neighbours were instructed to help illiterate heads of households (Richardson 1950).

This could create problems if one considers that 60.8% of the population over the age of 10 was considered illiterate in 1931 (Malta, 1931). As a result, there was a significant under-reporting of women in employment, especially in agriculture. The Cyprus censuses were administered by colonial officials who were diverted from their normal occupations for the census, but in remote areas the questionnaires were completed by the village headmen (Cyprus, 1911). Despite these concerns, a thorough analysis by Veropoulou, argues that at least for Cyprus, the census results are reasonably accurate (Veropoulou, 1997). Thus, there seems to be a consensus that as long as a researcher is aware of the limitations and accommodates for known underreporting, such as the case of women in agricultural occupations, one can create reasonably accurate GDP statistics.

#### **2.4 Conversion to 1938 (Maltese) Pound Sterling Purchasing Parity**

GDP at factor prices for Cyprus and Malta was calculated in the currencies used on the islands at the time: in Cyprus pounds and in pounds sterling in Malta. A comparison of GDP levels in the two economies requires their conversion to a common denominator. The methodology is based on the work of Bassino and Var der Eng (2002). The output of Malta was estimated using Cypriot prices and the output of Cyprus was estimated using Maltese prices for the benchmark year. Thus the prices of each country are weighted by the volumes of the comparison country in order to take into account their differences in economic structure.

Thus:

$$PPP_{iC} = \sqrt{\frac{\Sigma(P_{iM}Q_{iC})}{\Sigma(P_{iC}Q_{iC})} \times \frac{\Sigma(P_{iM}Q_{iM})}{\Sigma(P_{iC}Q_{iM})}} \quad (4)$$

where:

$PPP_{iC}$  = Purchasing power parity of the Cyprus pound to the pound sterling in Malta for the benchmark year

$P_{iM}$  = Price of item  $i$  in Malta

$P_{iC}$  = Price of item  $i$  in Cyprus

$Q_{iM}$  = Quantity of item  $i$  in Malta

$Q_{iC}$  = Quantity of item  $i$  in Cyprus

It was not possible to match all of the quantities of Cyprus with the prices of Malta or vice versa, due to limited comparative price data. Overall 55% of the Maltese and Cypriot total output was matched, the majority of which was in the agriculture, quarrying, construction and service industries. The resulting purchasing power parity ratio indicated that the general price level in Malta was substantially higher in all sectors. Thus in order to establish Purchasing Power Parity, the GDP of Cyprus increased by 178%. Thus all Cypriot GDP estimates were multiplied by that factor to produce Cypriot GDP in pound sterling as adjusted to the Maltese price level. This allows for level comparisons between Cyprus and Malta. Thus, comparing the GDP of Cyprus and Malta on an exchange rate basis is grossly misleading: in PPP terms, the aggregate output of Malta was 36.4% less than that of Cyprus in 1938.

**Table 1: GDP, Cyprus and Malta, PPP adjusted, 1921-1938.**

Year	Malta	Cyprus	Year	Malta	Cyprus
1921	4,725,551	6,646,683	1930	6,411,082	8,746,707
1922	5,119,876	7,126,253	1931	6,554,176	8,200,715
1923	5,436,448	7,346,775	1932	6,749,173	7,502,960
1924	5,876,981	7,176,289	1933	6,949,134	7,536,863
1925	6,017,227	7,733,700	1934	7,129,401	8,468,938
1926	6,208,017	7,424,759	1935	7,520,138	9,470,715
1927	6,237,203	8,331,890	1936	7,008,544	9,326,395
1928	6,009,303	8,146,485	1937	7,522,168	11,088,144
1929	6,490,731	9,241,507	1938	7,416,814	11,653,968

Note: In 1938, PPP, pounds sterling. Source: appendix B (PPP adjusted) and C.

The per capita, PPP, GDP in Malta and Cyprus in table 2 indicate that the per capita income level was quite similar throughout the interwar period due to the lower population in Malta. Contrary to Clark's estimation, Malta was not substantially ahead in terms of per capita GDP, despite being more urbanised than Cyprus. The slow growth of per capita GDP in Malta meant that Cyprus overtook Malta in per capita GDP, but the Maltese did not suffer the repeated recession felt by the Cypriots.

**Table 2: Per capita GDP, Cyprus and Malta, 1921-1938.**

Year	Cyprus	Malta	Year	Cyprus	Malta
1921	21.4	22.3	1930	25.4	26.9
1922	22.7	23.8	1931	23.6	27.1
1923	23.1	25.0	1932	21.2	27.5
1924	22.3	26.6	1933	20.9	28.0
1925	23.8	26.9	1934	23.1	28.3
1926	22.6	27.4	1935	25.4	29.4
1927	25.1	27.2	1936	24.6	27.1
1928	24.2	25.9	1937	28.7	28.6
1929	27.2	27.6	1938	29.7	27.9

Note: In 1938, PPP, pounds sterling. Source: appendix B (PPP adjusted) and C.

The fact that Malta did not have a higher per capita GDP level than Cyprus before the Second World War is important, as the national accounts of Malta for 1954 indicate that the island's per capita GDP was 17.6% lower than that of Cyprus, when based on the exchange rate parity of 1964 (Malta, 1964). Thus the belief of a higher income level in Malta in the interwar period was based on the assessment of British officials who found amenities not present in Cyprus but failed to take account of the general poverty of the population. It would be very difficult for Malta to have had a higher income in 1938 as in PPP terms the per capita GDP of Malta in 1950 was 53.6% lower than that of Cyprus; thus for this to be true Cyprus would have to grow at an implausible rate during the period 1938-1954.

The GDP estimates on purchasing power parity can be used as a base for converting the constant prices of 1938 into internationally comparative units. There is a first attempt, albeit with limited price data to make the GDP of both countries internationally comparative. The approach presented below represents the best possible at present, but this is far from ideal as it suffers from significant index number problems. More research is needed to establish a unified price index for the period 1921-2008 before a definitive estimate in international comparative currencies can be achieved.

Using a diverse mix of price indexes it was possible to convert the Cypriot GDP for the period 1921-1938, which was originally estimated in 1938 constant Cyprus pounds, to 1950 constant Cyprus pounds, which is the benchmark of the first GDP estimates of Cyprus. In order for this to be achieved, a unified price series was constructed using diverse evidence of the period 1938-1950.

There were several price indexes constructed in this period. A commission was established in 1950 in order to create a cost of living index that was more representative of the needs of government officials. The commission constructed a cost of living index for the period 1939-1944, shown in Table 3.

**Table 3: The Reddway commission COLA, Cyprus, 1939-1944 (1939=100)**

Date	Index	Date	Index
August 1939	100	August 1942	219
May 1941	133	October 1942	235
October 1941	181	January 1944	240

Source: Reddway.(1950)

The next price index was reported in the government gazette, as shown in table 4. Unlike the Reddway commission, nothing is known about the basket of goods that was used to construct this cost of living index. In addition the benchmark year is given as 1938/1939, making it difficult to evaluate if the starting date is the same as the starting date of the cost of living index presented in table 3. The government gazette of 1950 began a new price index with a benchmark year of 1950, which was based on the national accounts that were about to be constructed for the island.

**Table 4: Government Gazette COLAs, Cyprus, 1948-1950**

Government Gazette 1948 and 1949 (1938-1939=100)	
Year	12 month Average index
1948	337.08
1949	324.08

Government Gazette 1950 (Jan 1950=100)	
December	
1950	107

Source: Government Gazette 1949, MP298/1949 issue no.43, “Cost of living index”; PIO newspaper archive, Cyprus: Government Gazette Collection, Government gazette volume. 1950, p.654 “retail price index”.

The main issue of all the price indexes is that the inflation of 1938-1939 and of 1949-1950 was unknown. No other price data is available, and any further research needs to focus on these two main data gap in price data. Thus three different assumptions were attempted for plausibility:

- a) No inflation in 1939, and 1949-1950.
- b) No inflation in 1939, and that inflation in 1949-1950 equalled inflation of 1950-1951 (7%).
- c) Deflation of 7% in 1949-1950.

The price indexes were used to reflate the GDP in constant 1938 Cyprus pounds prices to GDP in constant 1950 pounds. The Cypriot GDP of 1950 in constant 1950 prices has been calculated in international comparison currencies by the total economy database (1990 Gheary-Khamis \$) and the Penn world tables (Heston *et al* 2009) in 2005 international dollars. Thus GDP of Cyprus for the period 1921-1938 has been estimated in both these international units, and using the PPP of Cypriot estimates to Maltese sterling the Maltese GDP was derived. The estimates under assumption B (no inflation in 1939 and 7% inflation in 1951) were chosen as the growth rate for the period 1938-1950 was much more in line with the qualitative description of the islands’ development at that period. These are presented in Table 5. Although this

procedure has many problems and it would be unsuitable if more price information is unearthed, it is the best possible under the present data conditions.

**Table 5: Per capita GDP of Cyprus and Malta, 1921-2008**

Unit	GDP per capita I\$ 2005	GDP per capita I\$ 2005	GDP per capita G-K \$ 1990	GDP per capita G-K \$ 1990
Year	Cyprus	Malta	Cyprus	Malta
1921	1,219	1,269	891	928
1922	1,293	1,357	945	992
1923	1,318	1,423	963	1,040
1924	1,273	1,518	930	1,110
1925	1,356	1,534	991	1,121
1926	1,287	1,563	941	1,142
1927	1,428	1,550	1,044	1,133
1928	1,381	1,474	1,009	1,077
1929	1,549	1,571	1,132	1,149
1930	1,449	1,532	1,059	1,120
1931	1,343	1,546	982	1,130
1932	1,208	1,570	883	1,148
1933	1,193	1,595	872	1,165
1934	1,318	1,613	963	1,179
1935	1,449	1,678	1,059	1,227
1936	1,402	1,542	1,025	1,127
1937	1,639	1,633	1,198	1,193
1938	1,693	1,588	1,238	1,160
1939	.	.	.	.
1940	.	.	.	.
1941	.	.	.	.
1942	.	.	.	.
1943	.	.	.	.
1944	.	.	.	.
1945	.	.	.	.
1946	.	.	.	.
1947	.	.	.	.
1948	.	.	.	.
1949	.	.	.	.
1950	2,576	.	1,883	891
1951	2,644	.	1,814	929
1952	2,875	.	1,969	964
1953	3,190	.	2,136	1,007
1954	3,478	.	2,144	1,045
1955	3,628	.	2,192	1,094
1956	3,963	.	2,406	1,218
1957	4,060	.	2,510	1,215
1958	3,382	.	2,387	1,278
1959	3,564	.	2,489	1,291
1960	3,313	.	2,280	1,350
1961	3,641	.	2,508	1,338
1962	4,219	.	2,746	1,281
1963	4,317	.	2,885	1,283
1964	3,694	.	2,590	1,328
1965	4,596	.	3,146	1,439
1966	4,849	.	3,315	1,603
1967	5,385	.	3,738	1,709
1968	5,630	.	3,878	1,876
1969	6,279	.	4,204	1,975

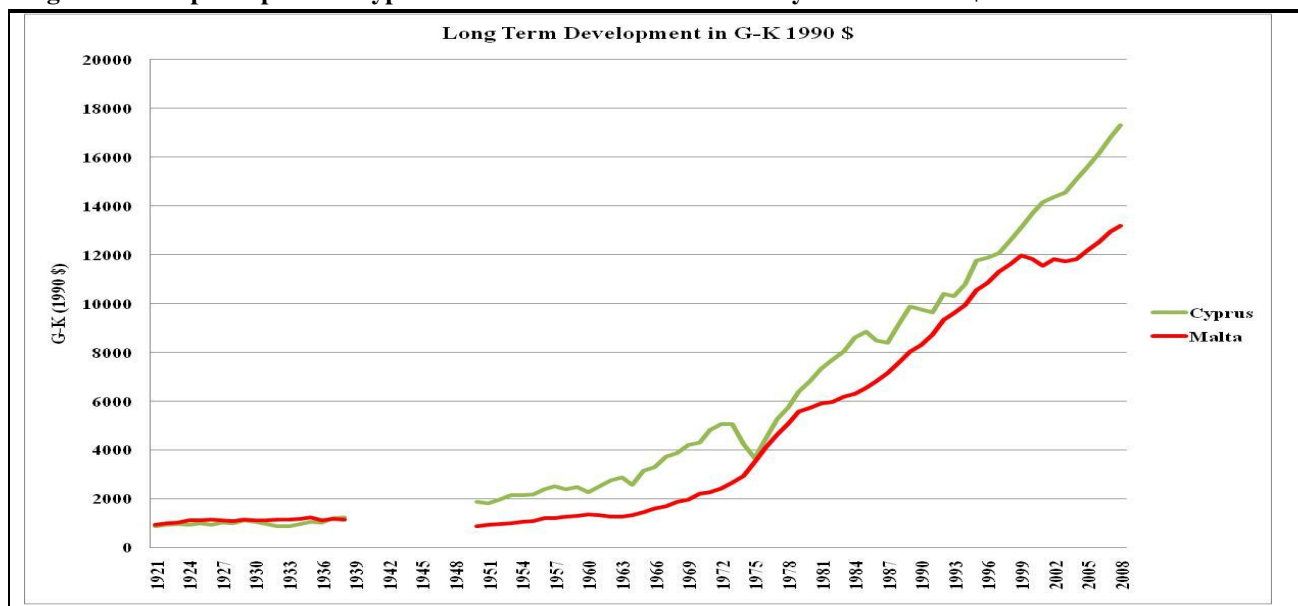
1970	6,303	4,157	4,297	2,206
1971	6,884	4,015	4,806	2,261
1972	7,142	4,124	5,070	2,438
1973	7,193	4,607	5,059	2,657
1974	5,613	5,015	4,230	2,938
1975	4,707	5,303	3,656	3,503
1976	5,797	6,306	4,482	4,123
1977	7,323	7,032	5,278	4,635
1978	8,157	7,846	5,752	5,088
1979	8,967	8,672	6,382	5,564
1980	9,492	8,902	6,807	5,735
1981	9,450	9,268	7,332	5,897
1982	9,836	9,651	7,715	5,960
1983	10,204	9,620	8,029	6,194
1984	11,116	9,749	8,618	6,318
1985	11,309	9,982	8,856	6,553
1986	11,402	10,421	8,477	6,810
1987	12,154	10,808	8,387	7,149
1988	13,485	11,676	9,167	7,574
1989	14,646	12,380	9,877	8,034
1990	15,196	13,124	9,762	8,318
1991	14,991	13,827	9,656	8,722
1992	16,159	14,231	10,391	9,344
1993	15,530	14,856	10,296	9,606
1994	16,468	15,743	10,784	9,947
1995	17,677	16,315	11,750	10,541
1996	17,814	16,586	11,879	10,868
1997	17,885	17,268	12,075	11,312
1998	18,673	17,914	12,597	11,612
1999	19,238	18,616	13,123	11,985
2000	20,275	19,442	13,699	11,816
2001	20,756	18,496	14,161	11,567
2002	21,267	18,587	14,375	11,821
2003	21,427	18,700	14,567	11,735
2004	22,550	18,716	15,095	11,820
2005	23,219	19,553	15,607	12,187
2006	24,075	20,094	16,167	12,527
2007	25,141	20,983	16,797	12,937
2008	.	.	17,320	13,190

Note: in Geary-Khamis 1990\$ and international 2005\$. Source: Apostolides (2010), Heston, *et al* (2009); Total Economy Database (2010)

The above estimates allow for the first time a long run exposition of the development of Cyprus and Malta. As figure 1 indicates, both states seem to have not established the groundwork for modern economic growth prior to the Second World War. The GDP estimates allow now for more focus on other macroeconomic data that will help to explain the proximate and ultimate causes for data.



**Figure 1: GDP per capita for Cyprus and Malta 1921-1938 in Gheary-Khamis 1990 \$.**



Source: Table 5

## 2.5 Margins of Error of Value Added Estimates By Industry

The estimates are also provided with margins of error in each sector of the economy, as suggested by Feinstein and Thomas, in order to allow researchers to understand the limitations of each GDP component for Cyprus and Malta (Feinstein and Thomas, 2001). The estimates have also undergone substantial robustness tests which are included in the Appendix, but the error estimates here indicate the degree of confidence the overall GDP and sector estimates.

**Table 6: Estimate Feinstein & Thomas Error Bands for the Benchmark year 1938**

	Cyprus		Malta	
	Share of GDP	Subjective error estimate	Share of GDP	Subjective error estimate
Agriculture	24.5%	+/- 6%	7.5%	+/- 4%
Mining	17.3%	+/- 4%	1.9%	+/- 5%
Manufacturing	16.8%	+/- 9%	27.6%	+/- 13%
Construction	8.2%	+/- 10%	4.8%	+/- 4%
Services except Banking sector	32.2%	+/- 18%	58.0%	+/- 18%
Banking sector	1.0%	+/- 5%	0.5%	+/- 18%
Total GDP	100%	+/- 8%	100%	+/- 11%

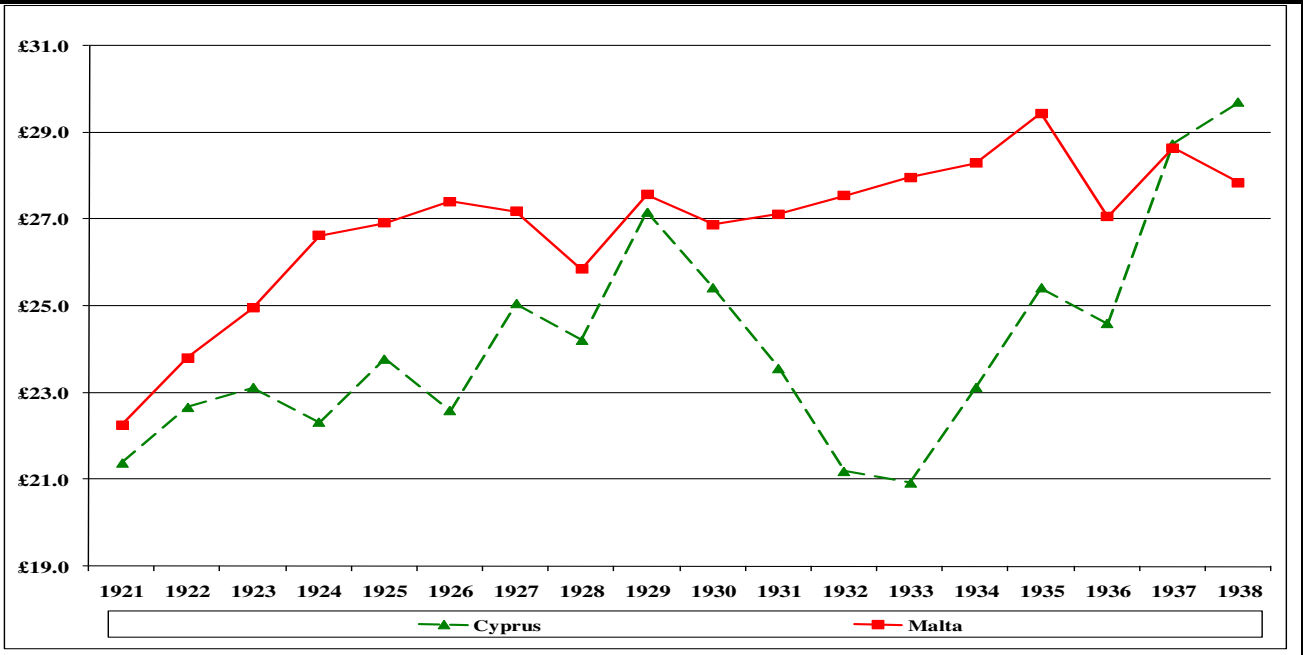
Overall, data quality is sufficiently robust to allow for reliable estimation of output. There are issues of data quality mainly due to the under-reporting of female occupations in the census, but these weaknesses are partially addressed by re-calculating the proportion of women in agricultural employment. Yet, the reliability of the GDP estimates is not only based on the quality and quantity of the data sources: the methodology used

has an impact on the reliability of the estimates. Thus a thorough analysis of the estimation procedures will allow one to better understand the possible limitations of the islands' historical national accounts.

### 3. GDP and GDP per capita estimates

The GDP, exports and imports of Cyprus and Malta in 1938 constant prices (Pounds sterling) is shown below.

**Figure 2: Per capita GDP, Cyprus and Malta, 1921-1938.**



Note: In constant 1938 million pounds sterling. Source: See table 2

The peak-to-peak growth (1923-1938) of GDP per capita was 3.1%, which would seem at first glance as satisfactory. However, there was great volatility of aggregate output, especially during the 1920s: this was due to the fact that agriculture constituted a large part of the economy and its output was dependent on the island's volatile weather, which was particularly disruptive during the great depression. The great depression had a great impact on the economy of Cyprus, since GDP in 1932 was 18.8% lower than in 1929 with recovery only being achieved in 1935. The recovery from the depression was however rapid and was sustained until the end of the period.

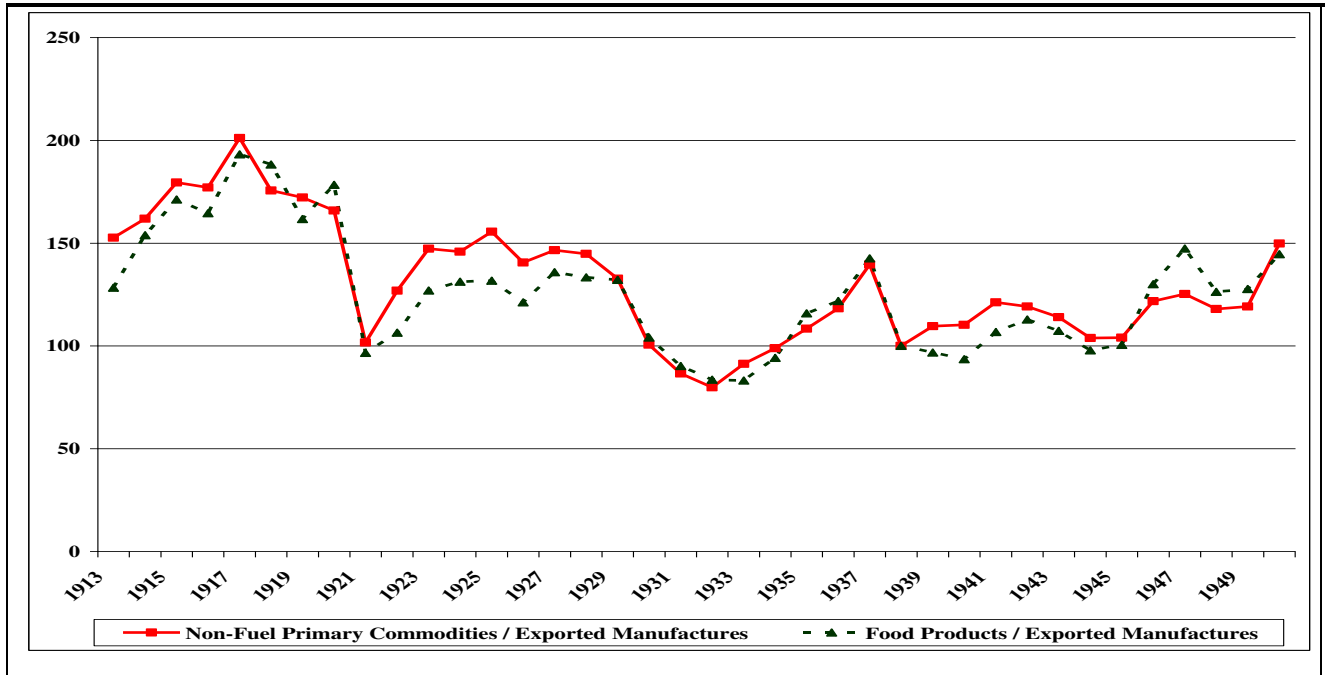
The combination of the great depression and the serious drought of 1931-1933 wiped out all per capita economic growth since 1921. Per capita GDP in 1932-1933 was less than in 1921, which was a year of severe recession in Cyprus. The economic frustrations of the Cypriot during the events preceding the October 1931 riots were understandable, as the depression wiped out ten years of economic growth and progress, with Cypriots being, on average, worse off than during the recession of 1921. However, the nature of the economy changed very rapidly due to the rapid expansion of Copper Pyrites mining industry,

especially by the Cyprus Mines Corporation (CMC). The corporation exported all its ore and imported the vast majority of machinery and intermediate consumption goods, resulting to the Cypriot economy opening up to global trade.

The great depression led to four years of recession in Cyprus with per capita GDP in 1933 being 23% lower than its 1929 level. The combined effects of a serious and prolonged drought and the trade depression resulted in a severe reversal of output and thus of average income, especially for the rural majority. It is worth noting that figure 2 charts the decline in constant prices, yet the fall of output in current prices was much more serious, with dramatic effects to the agricultural industry. Figure 3 indicates that the global prices of agricultural goods declined faster than the prices of manufactured products, and this was no different in Cyprus, as indicated by the substantial price decline of the main agricultural products seen in table 4.5. Wheat and carobs, two important products in agriculture, experienced even more dramatic falls. The consumer price index declined by 64% from 1921 to 1934, and prices of key products did not recover by 1938; food prices declined even further, falling by 85% and remaining at low price levels until 1938 (see Appendix A). Thus the terms of trade moved against the value of the main products of Cyprus, at a time when the drought was reducing the output of these products: the simultaneous reduction of volume and price brought about a 'perfect storm' of declining values and volumes of agricultural output, leading to a tremendous decline in the incomes of Cypriot farmers. Rural Cyprus experienced very serious hardship during the period 1929-1934.

The above results indicate that the Cypriot economy began its transformation during the end of the Second World War. Cyprus benefited by being integrated in the nearby markets through the Middle East Supply Centre during the war, while Malta suffered a prolonged siege and blockade that caused considerable hardship and damage, leading to a significant decline in income (Wilmington 1971). In addition, the Second World War increased Cyprus' strategic importance, opening a substantial income gap between Cyprus and Malta.

**Figure 3: Global index of prices of agricultural products relative to manufactures, 1913 -1950 (1938 = 100).**



Source: Grilli & Yang (1988), Appendix 1.

Despite the fact that many considered Cyprus and Malta similar due to the connection with the British Empire and the existence of a limited constitution, figure 2 indicates that the growth performance of Malta is very different to that of Cyprus. Malta suffered its worst economic recession in 1919 due to the sudden reduction in military expenditure during demobilisation, yet by 1921 a gradual recovery was underway. The recovery continued until 1927 but growth was slowing down, leading to a mild recession in 1928.

The onset of the Great Depression (1929-1933) had a very limited effect on Malta. The global reduction of trade and output seemed to further slow down Malta's economic growth. Perhaps uniquely in Europe, Malta had positive GDP throughout the period of the great depression. The greatest effect of the depression was on the re-exporting business in Malta, which did not recover to the pre-depression levels. This unusual output trend exhibited by Malta was due to its high dependence on British military expenditure: Malta was not dependent on the global economy for its prosperity. The very large imbalance of exports and imports in Malta was reliant on indirect trade, namely inflows of military expenditure from Britain, in order to fund its large current account deficit. Such indirect income flows had declined from the peak of the First World War, but remained relatively stable during the 1920s and early 1930s.

Military expenditure in the interwar period did not provide the prosperity that it bestowed to Malta during the First World War. Although the total military expenditure spent in Malta could not be calculated, the aggregate defence expenditure of Britain was substantially reduced during the period 1919-1936 (Bond & Williamson 1988). In addition the Mediterranean had a lower priority in interwar strategic planning than

other operational theatres, resulting in a reduction of the defence capabilities of Malta as expenditure being diverted to other military sectors, leading to a decline in military expenditure on the island (Pratt, 1995). Since the level of British military expenditure was the largest determinant of Maltese economic performance, the very gradual growth of GDP in the 1930s was linked to the reluctance of Britain to re-arm in a substantial way until 1937 (Eloranta, 2009). It is not surprising that the greatest decline in output in Malta took place during the Abyssinia crisis in 1936. The imminent threat of war with Italy resulted in the Royal Navy moving its Mediterranean base away from Malta, with an immediate repercussion to the Maltese GDP. A recovery did take place in 1937 as the crisis was abated and the fleet returned to Malta, while at the same time the British remilitarisation expenditure began to trickle into the island, boosting output. Malta did not participate in the European recovery after the great depression, despite the rapid recovery of other countries within the sterling bloc (Feinstein, Temin and Toniolo, 1997). As a result, Malta's per capita output in 1938 was just 14.3% higher than in 1929, while in Cyprus the corresponding figure was 26.1%.

In terms of average per capita growth table 7 indicates that Cypriot growth rate was similar to the experience of other Southern European countries while Malta's economic growth was slower than most of Southern European countries. The economic performance of Cyprus was as lacklustre as other Southern European countries, with Malta growing slightly slower by 1938. Perhaps surprisingly, both islands were part of the greater Southern European group of countries who saw their income disparity with the developed nations grow, despite the fact that they did not suffer serious negative consequences due to the First World War.

It would seem that the small size of Cyprus and Malta did not provide them with an advantage over their neighbours in terms of per capita GDP growth: the existence of a large copper ore body relative to the island's size on Cyprus and the presence of the Royal Navy in Malta did not result to Cyprus and Malta becoming non-typical growth overachievers. The colonies of Cyprus and Malta were doing as badly as Greece, Turkey and Bulgaria, who suffered considerably in the First World War. The end of the First World War finished late for these independent countries in the Eastern Mediterranean, with Greece and Turkey fighting a war until 1922. In addition these countries faced civil war, political and economic instability, as well as having their borders re-drawn. The negative repercussions of the First World War also led to their governments having to provide for the forced repatriation of refugees and tackle with hyperinflation. Cyprus and Malta faced none of these problems after the First World War: the war was very beneficial to their economies, while their status as British colonies meant that they were not affected by war damage. Yet despite this, Cyprus and Malta did as badly as Bulgaria and Greece; looking at the annual rates of GDP growth, it is evident that the growth performance of the colonies (and of Malta in particular) lagged behind in the post-depression recovery, while Cyprus had a much larger fall of GDP during the recession than the independent states which were battling with so many additional problems.

**Table 7: Average per capita GDP growth, South European countries and colonies.**

	Period	Currency	Growth rate per annum (%)
Turkey	1923–1939	1990 Geary-Khamis Dollars	3.0
Italy	1921–1938	1990 Geary-Khamis Dollars	1.6
Spain	1921–1938	1980 Pesetas	-0.6
Greece	1921–1938	1914 Drachmas	1.6
Bulgaria	1921–1938	1911 Levas	1.7
Cyprus	1921–1938	1938 Pounds Sterling (Maltese Prices)	1.9
Malta	1921–1938	1938 Pounds Sterling (Maltese Prices)	1.3

Source: Bulgaria- Ivanov "Bulgarian National Income" (Unpublished) Table A.O; Turkey- Pamuk, "Intervention during the Great Depression - Another Look at Turkish Experience", Ch.12 in Pamuk and Williamson, *The Mediterranean...* (2000), p.321, Table 12.1; Greece - Kostelenos, *et al*, *Ακαθάριστο...* (2007), Table 8-Ib; Italy- Maddison, A., *Statistics on World...*(2009); Spain- Prados De la Escosura "Spain's Gross Domestic Product..." (1993), Appendix D, Table D2; Malta/Cyprus- Table 3.12.

#### 4. Labour productivity, Growth contribution and shift-share analysis.

The desegregation of output into sectors allows for sector estimates of labour productivity. Multifactor productivity was not estimated due to the lack of capital stock estimates. The labour productivity that could be estimated here is value added per worker. The absolute number of labour used is shown in table 8. The information was collected by occupation statistics for the censuses of 1921 and 1931; the occupation statistics for 1938 are the log-linearly interpolated results of the Cypriot census of 1946 and of the Maltese census of 1948. Some corrections were necessary, thus altering the occupation results presented in the censuses. The occupations were re-classified in order to fit the correct definition of what constituted primary, secondary and tertiary sector. In addition those who were classified as labourers were assigned to the manufacturing and construction sector, since in the 1921 census labourers were defined as belonging to that sector. As a result there can be no distinction between construction and manufacturing and the labour productivity is given for the combined secondary sector.

Some additional alterations of the census result were needed to correct known underreporting in the occupation data. Women employed in agriculture were revised upwards in order to take into account the known underreporting in Agriculture.

**Table7: Labour force, Malta and Cyprus, 1921-1938.**

<b>Malta</b>	Total Labour Force	Agriculture	Mining and Quarrying	Manufacturing and Construction	Service
1921	89,841	27,931	944	25,101	35,865
1931	93,304	25,678	2,246	25,281	40,099
1938	95,036	24,143	1,457	24,468	44,968
<b>Cyprus</b>	Total Labour Force	Agriculture	Mining and Quarrying	Manufacturing and Construction	Service
1921	160,708	107,024	1,377	31,560	20,747
1931	178,663	110,644	3,431	35,532	29,056
1938	199,835	109,748	16,861	34,773	38,453

Sources: Percival, *Census...1946* (1947); Hart-Davis, *Cyprus...1931* (1932); Hart-Davis, *Cyprus...1921* (1922); Malta, *Eleventh Census...1948* (1949); Malta, *Census...1931* (1932) Malta, *Census...1921* (1922)

Labour productivity was estimated by dividing the sector output by the number of employed persons in that sector<sup>10</sup>. However, due to problems in the numbers of persons employed, the labour productivity estimates shown in table 8 are less robust than the GDP results and need to be treated cautiously.

**Table 8: GDP per employee (Labour Productivity), Cyprus and Malta, 1921-1938**

	Cyprus			Malta		
	1921	1931	1938	1921	1931	1938
Agriculture, Forestry and Fishing	20.1	23.0	26.0	13.3	20.4	23.0
Mining & Quarrying	70.2	109.0	119.5	26.7	68.1	98.0
Manufacturing, Handicraft, Construction and Utilities	58.9	61.3	83.6	61.4	89.2	98.0
Services	113.8	109.2	93.5	72.7	86.3	91.5
Total Output Per Worker	40.2	44.8	56.9	50.6	68.5	75.8

Note: The implied rental income from housing was removed from the GDP before calculating productivity. In constant 1938, PPP, pounds sterling.

Source: Appendix B (PPP adjusted), Appendix C; Table 3.14.

Bearing in mind the limitations, labour productivity growth in Cyprus and Malta was quite significant during the interwar period: GDP per employee grew by 2.4% per annum in Malta and by 2.1% in Cyprus during the period 1921-1938. However, as the estimate does not account for possible increases of working hours, then part of the growth of GDP per worker may be due to an increase in the average hours worked.

The slower growth of Cypriot productivity was due to the problems facing Cypriot agriculture, which prevented it from becoming as productive as it could have been. The lack of progress in Cypriot agriculture can be seen by the fact that by 1938, Maltese farmers were more productive than Cypriots, despite the inherent advantages of farming in Cyprus. The dynamic growth of mining in Cyprus was not just a phenomenon in terms of output: mining was also becoming very productive, overtaking the service sector as

<sup>10</sup>A better way of estimating productivity would be taking into account the number of hours worked. However, this is not possible since there were a lot of people employed in other sectors who were also part time farmers. Since the number of hours worked in each sector is unknown, productivity estimates per labour provide us with better estimates.

the most productive industry. The secondary sector's productivity grew substantially during the interwar period, yet it is not possible to see if such advances took place in the manufacturing or the construction industry as the number of workers working in construction could not be separated. The decline in the service sector productivity in Cyprus is in part due to the estimation method of service output, since a great deal of service value added was estimated using constant productivity assumptions; however it is possible that the rural unemployed and underemployed who were facing the agricultural crisis entered in low productivity service work in order to make a living, thus reducing the productivity of the sector (Eletheria, 1927).

Table 9 multiplies the growth rate of each sector by its initial share of GDP in order to quantify the relative contribution to economic growth. It confirms that the mining sector was pivotal in Cypriot growth, both in the 1920s and in the 1930s. However, it also indicates how in the 1920s the tertiary and secondary sectors, as well as the agricultural industry, were more important: despite growing more slowly than mining, their large share to GDP meant that their contribution was more significant. This changed in the 1930s: mining grew even faster and agriculture stagnated, dragging Cypriot growth downwards. If Cypriot agriculture would have managed to perform marginally better in the 1930s, the overall growth rate of Cyprus would be much more rapid. On the other hand, Maltese growth was centred on the service and the manufacturing sectors, but it was the slowdown of the service sector that led to the slowdown of GDP in the 1930s.

**Table 9: Relative contributions to growth (%), Cyprus and Malta, Peak-to-Peak**

Malta						
	GDP growth per annum	Agriculture	Mining	Manufacturing, Handicrafts, Utilities and Construction	Service	
1925-1937	1.88	0.05	0.06	0.84	0.91	
1925-1929	1.91	0.27	0.22	0.56	0.82	
1929-1937	1.86	-0.07	-0.01	0.97	0.93	
Cyprus						
	GDP growth per annum	Agriculture	Mining	Manufacturing, Handicrafts Utilities and Construction	Service	
1925-1937	3.0	0.16	0.62	0.87	0.91	
1925-1929	4.6	0.91	0.87	0.92	1.69	
1929-1937	2.3	-0.20	0.83	0.81	0.52	

Note: Measurement for all sectors from peak to peak in GDP

Source: Appendix B (PPP adjusted), Appendix C.

Shift share analysis of labour productivity allows us to make some first estimates of the impact of structural change on productivity growth. The results are indicative rather than definitive due to the problems of labour productivity described above, but serve to highlight what underpinned growth in Cyprus and Malta. The methodology used is the same as in Fagerberg (2000), where growth in aggregate output per worker is



decomposed into three elements, with the ‘residual’ being given an explicitly economic interpretation. The increase in total productivity is broken down in sectors and into the sector shares of the labour force in order to isolate three effects:

- The *static shift effect* (I) indicates the increase of productivity that is due to the re-allocation of labour. Thus the effect is significant and positive when the employment share of the sectors with high productivity increases at the expense of those of low productivity.
- The *dynamic shift effect* (II) measured the impact of the interaction between changes in productivity within industries and changes in the allocation of labour between industries. It will be high if the sector with the largest productivity growth also has the largest relative labour inflow.
- The *intra-sector effect* (III) indicates the contribution to productivity growth from within individual sectors as weighted by their respective employment shares. The effect is significant if the labour productivity increases with the industry’s share of labour remaining unchanged.

A formal explanation is provided below. Define

Q= Aggregate Value Added

P= Labour Productivity (value added per employee)

L= Total Labour Input

$$P = \frac{Q}{L} = \frac{\sum Q_i}{\sum L_i} = \sum \left[ \left( \frac{Q_i}{L_i} \right) \left( \frac{L_i}{\sum L_i} \right) \right] \quad (5)$$

With i = sector (i = A, G, ..., H) shown in (3).

Define

$$P_i = \text{Labour Productivity in sector } i \quad (6)$$

$$S_i = \text{The Share of Labour of sector } i \text{ in total employment} \quad (7)$$

Thus substituting (6) and (7) into (5)

$$P = \sum_i (S_i P_i) \quad (8)$$

Further

$$\Delta P = P_t - P_0 \text{ and } \Delta S = S_t - S_0$$

Where t= final year and 0=start year

From (7) follows:

$$\Delta P = \underbrace{\sum (P_{i0} \Delta S_i)}_I + \underbrace{\sum (\Delta P_i \Delta S_i)}_{II} + \underbrace{\sum (S_{i0} \Delta P_i)}_{III} \quad (9)$$

Where (I) is the *static shift effect*, (II) being the *dynamic shift effect* and (III) being the *intra-sector effect*.

As growth rate:

$$\frac{\Delta P}{P_0} = \sum \left( \frac{P_{i0} \Delta S_i}{P_0} \right) + \sum \left( \frac{\Delta P_i \Delta S_i}{P_0} \right) + \sum \left( \frac{S_{i0} \Delta P_i}{P_0} \right) \quad (10)$$

The results of the shift share analysis are presented in the table below.

**Table 10: Shift share decomposition of labour productivity (% per annum), 1921-1938.**

	Percentage change of output per worker	Static Shift	Intra-sector	Dynamic Shift
<b>Cyprus</b>				
1921-1938	2.06%	1.10%	0.81%	0.15%
<b>Malta</b>				
1921-1938	2.41%	0.32%	2.05%	0.04%

Note: The implied rental income from housing was removed from the GDP before calculating productivity.

Source: Table 7, Table 8.

The static shift of Cyprus, which dominated labour productivity, was based on the mining and service industries. These industries were the only industries with an increasing share of the labour force. People were moving out of low productivity agriculture and into services that had a higher productivity. However, the productivity of the service sector declined as the additional labour did not induce productivity improvements, which explains the very limited impact of the dynamic shift effect. Only the mining sector had a positive dynamic effect, but its impact is limited due to the fact that other increasingly productive industries, such as manufacturing, were shedding labour in Cyprus. The intra-sector productivity effect is important, as the secondary sector and to a lesser extent agriculture, maintained their output despite the relative decline of labour they employed.

This intra-sector effect is particularly important in Malta, with 85% of the increase in productivity coming from sectors maintaining output despite shedding labour. This was particularly true in the secondary and tertiary sector. The only industry with some static and dynamic effect was the service industry, but such effects were much less powerful than the intra-sector effect. The low value of static and dynamic shift imply that labour was not moving to the faster growing sectors and that structural change in terms of output and labour shift was limited.

The results of labour productivity and of the shift share analysis are contrary to expectations: they imply that the lacklustre growth of the islands was due to the failure in providing enough employment for the growing populations of the islands and not due to the lack of productivity growth. This was especially true for Malta: the inability of Malta to provide enough employment is seen by the divergence of the per capita GDP and per

worker GDP. This implies that the lacklustre growth was due to the lack of employment opportunities, since those in employment managed to substantially increase their productivity. The problem in interwar Malta was one of a lack of additional opportunities for employment. Thus the population was growing faster than the opportunity to employ them remuneratively, but more research is needed to substantiate this claim.

The substantial growth in labour productivity might indicate a story of “haves” and “have-nots”. If Surridge’s estimates were correct and 25% of the rural population in Cyprus were below the poverty line, then it is likely that these persons were not fully participating in the nation’s economy (Surridge, 1930). The population was rising rapidly in both Malta and Cyprus, while labour productivity was rising at a faster rate than per capita GDP. Thus employment grew slower than population; as a result more and more people must have become unemployed or underemployed. This suggests that the limited spoils of the islands’ lacklustre growth were not shared equally. This has not been indicated in the bibliography, but if factual, these underutilised labourers might have been behind the increasing political violence that struck Cyprus and Malta in the 1930s. This pattern of unequal distribution of the gains of growth seems to have also occurred in interwar Turkey and Egypt; similar arguments have been used to explain the limited urbanization in these countries during the interwar period, since “real wages increased for those who had a job, but unemployed migrants could not hope to benefit from urban life... thus the rural people remained in their villages and tried to make both ends meet” (Rothermund, 1996).

## **5. Conclusion**

The per capita GDP growth performance of Cyprus and Malta was not spectacular, with the predominantly agricultural economy being the prime cause of violent expansions and contractions of Cypriot GDP. Such contractions had calamitous outcomes: the combination of drought and the great depression led to a large and sustained drop in output in constant and current prices, leading to the eruption of violence in Cyprus. Recovery did not come from the agricultural sector but from the rapidly emerging mining and construction industries, whose dynamism would also underpin the rapid economic growth after the Second World War. The failure of the farming sector to provide for the growing rural population was the reason that Cyprus did not grow faster than its South European neighbours; the potential was there if the agricultural crisis could have been abated.

Maltese economic growth was much more stable, but slower than other South European economies: the dependence on British military expenditure in Malta led to relatively stable but slow economic growth, as military expenditure in Malta gradually declined. This dependence led to Malta experiencing trade cycles which were at odds with global economic conditions. It was perhaps the only country in Europe not to experience a reversal of GDP during the great depression, but to experience a recession in 1936 as the Royal Navy abandoned the island due to fears of an Italian attack. The slow GDP growth was threatened by the

increase in the population due to the lack of migration opportunities, and the economy found it difficult to employ the increased population. The political disturbances that led to the suspension of the constitution in Malta did not take place in a background of serious economic distress but of continuing economic stagnation. The economic structure of the island encapsulated the British armed forces dominance: the Royal Navy Dockyard overshadowed the island's manufacturing industry, while the service industry catered the needs of British servicemen. The seeds of future post-1945 growth were not yet sown in interwar Malta.

Comparing Cyprus and Malta in terms of per capita, PPP, GDP, indicates that incomes were quite similar in 1921, but that Cyprus pulled ahead by 1938. The post-1945 income gap between the two states is a legacy of the interwar period: as Cypriot mining drove the economy forward, the Maltese dependence on military expenditure caused it to lag behind, only for their differing rates during the Second World War to increase their income divergence.

The estimates of labour productivity indicate that there was an increase in productivity; it was not possible to distinguish if this increase in productivity was due to longer work hours or better technology. The productivity increases were across the board, but they were slower in the agricultural sector. The secondary sector exhibited a great increase in productivity but its share of the labour force was reduced; with the exception of Cypriot mining, labour was not going to the sectors with the largest productivity growth. Most worryingly for the societies of Malta and Cyprus, the results of labour productivity seem to indicate a story of insiders in employment reaping the benefits of growth and an increasing number of unemployed outsiders who drifted in and out of employment and poverty.

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GPO = Government Printing office  
HMSO= Her Majesty's Stationary Office

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**CO456:** Colonial Office: Cyprus, Miscellanea.

**CO158:** Colonial Office: Malta, Original Correspondence

**CO161:** Colonial Office: Malta, Sessional Papers.

**CO162:** Colonial Office: Malta, Government Gazettes.

**CO163:** Colonial Office: Malta, Miscellanea.

**FO371:** Foreign Office: Political Departments: General Correspondence from 1906-1966

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**SA1:** Colonial Secretarial Archive.

**V5:** Unpublished Government Manuscripts

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## ***Appendix***

### ***Appendix A: Creating the Consumer Price Index (CPI).***

The objective of a consumer price index is to track the changes in the prices affecting the purchases of households. In order to construct it, one needs to find a representative cross section of the target society, and record their spending patterns through a budget enquiry for a base year. The enquiry enables one to get the average expenditure pattern on items spent by a group in a way that is representative of the whole society. Then prices of the items are measured each year; the quantities purchased are those that were purchased in the base year and the weight they carry in the total index is determined through the budget survey.

There were three possible studies which could have been used as the basis of a CPI: the Cypriot statistical (blue) book of 1946, a study reconstructing the Cypriot CPI in modern basis in 1949, a study on the living conditions of Maltese labourers in 1938 and a study on the calories consumed by Maltese families, also in 1938 (GPO, 1947; Reddway, 1950; National Archives, Rabat. File: GMR 1368).

The consumer price index was mainly based on the report on constructing a cost of living index in Cyprus in 1949, but with information from Malta used to alter some product weights on the Maltese CPI. The Cypriot report was preferred over the others as it provided detailed information on the weight of each individual product in the Cypriot basket, while the other sources were less precise and focused almost exclusively on foodstuffs. In addition, the 1949 index provides the advantage of creating a CPI that will be compatible in methodology with the estimates of CPI of Malta and Cyprus after the Second World War, enabling the CPI to be extended forwards.

The CPI has five general price categories: rent, food, tobacco / alcohol, fuel / light, clothing and other. The weight of each category in the final index is shown below. There was no price information for articles of clothing in Malta. As a result of the lack of information, it was decided to share the weight of clothing to fuel / light and other items.

**Table 11: Weights of the Maltese and Cypriot CPI.**

	Cyprus	Malta
Rent	16	16
Food	49	49
Tobacco and Alcohol	11.8	11.8
Fuel and Light	4.4	9.4
Clothing	10	N/A
Other Items	8.8	13.8

Source: Reddway, *Recommendations about the Cost of Living...* (1950) p.4

Within these categories the prices of items were collected: the items and their categories are shown below. Care was taken for items that were in consumption by the population and not for the British expatriate market.

**Table 12: Items included in the CPI of Malta and Cyprus**

	Cyprus Items	Malta Items
Food	cheese, salt, mutton, flour (wheat), sugar, rice, bread, potatoes, eggs, milk, olive oil, french beans, cow peas, broad-beans,	wheaten bread, English cheese (English), Maltese cheese, eggs, milk, beef, mutton, pork, rice, sugar, salt, potatoes, beans
Tobacco and Alcohol	brandy, wine	wine (common), brandy (local), beer, tobacco (local)
Fuel and Light	kerozene, tobacco, wood (for fuel), charcoal	kerozene, firewood kindling, firewood,
Clothing	shoes, cloth (for one shirt), hosiery	N/A
Other Items	soap, coffee, boot cream	coffee, tea, soap

Sources: Cyprus, Statistical (Blue) Books, 1921-1938; Malta, Statistical (Blue) Books 1921-1938.

The yearly prices of these products were divided by the base year of 1938 in order to arrive at an index for each product. The products were then bundled in the six categories and the change of prices averaged within the subcategory. The subcategories were then multiplied by the weights given in Table and summed in order to create the unified CPI with a base year of 1938. The CPI of Malta and Cyprus is presented below. It is encouraging that the downward trend is very similar to both Malta and Cyprus, since they were estimated independently. There was a sharp deflation throughout the period: the British attempt to join the gold standard at its pre-war level led to rapid deflation in the 1920 while the decline in prices during the depression meant that inflation was only present in the period of recovery of 1934-1938.

**Table 13: Cyprus and Malta CPI, 1921-1938 (1938=100).**

	Cyprus	Malta
1921	163.2	143.2
1922	141.7	128.9
1923	133.7	128.1
1924	136.1	123.8
1925	136.5	116.5
1926	141.5	120.4
1927	144.0	119.2
1928	140.6	114.6
1929	118.8	104.5
1930	107.0	104.3
1931	105.7	98.8
1932	104.3	100.9
1933	101.8	103.8
1934	98.9	97.0
1935	97.1	99.0
1936	100.2	97.6
1937	101.2	99.2
1938	100.0	100.0

Sources: Cyprus, Statistical (Blue) Books, 1921-1938

Malta, Statistical (Blue) Books, 1921-1938

## Appendix B: Cypriot GDP at factor cost, 1921-1938

### Notes on the Cypriot GDP:

The value added is categorised on the basis of the NACE rev.2 nomenclature of the European Union (EUROSTAT, 2008). The European Union nomenclature divides output into broad economic sectors, labelled A to U. For example, agriculture, forestry and fishing are summed as economic sector A. These sectors are in bold in the general table, while a summary table is provided below. The breakdown of GDP breaks up these sectors in industrial divisions identified by digit codes: thus agriculture is 1, forestry 2, and so on. The value added of these industrial divisions is shaded and in italics. These are broken down into industrial groups and classes, identified by three or four digits: for example, growing of cereals is 1.11, and of vegetables 1.13. Some industrial sections/divisions/groups and classes were added together if the industries were involved in similar production and a greater disaggregation was not possible. Where it was not possible to estimate a product, or where the NACE category was not applicable for Cyprus, the category was removed. These non-estimated sectors were just a small part of GDP. The handicraft sector was estimated separately from the manufacturing sector, and is given below the formal manufacturing sector in a different shaded font, thus allowing for a duplication of some categories. Thus the total production of industry is divided in formal manufacturing and handicraft. If one is interested, for example, in evaluating total textile production one can add the digits 13, 14, 15 of both the manufacturing and the handicraft sectors. All output estimates are given here in constant 1938 Cyprus pounds; due to the differing purchasing power parity of Malta and Cyprus the results presented here in Cyprus pounds do not match the tables in the thesis since, as explained in Chapter 3; an adjustment factor to Maltese prices was necessary. The constant 1938 Cyprus pounds can be converted in Maltese pound sterling of 1938 by the Purchasing Power Parity (PPP). In order to convert the values in Appendix B to constant 1938 Maltese pound sterling, multiply the values presented below by a factor of 1.78 (3 significant figures).

**Table 14: Summary of Cypriot GDP, 1921-1938, in constant 1938 Cyprus Pounds.**

NACE rev 2 Classification	Description of Product	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
Section A	Agriculture, Forestry and Fishing	1207017	1393514	1513823	1397984	1457649	1403025	1536600	1403240	1621980	1609600	1428404	1294505	1192905	1444947	1689899	1434049	1540654	1601156
Section B	Mining and Quarrying	54315	76642	97366	186530	203972	216459	308242	335900	401457	260549	209932	169665	231024	244777	426937	554036	910591	1131233
Section Ca) + Cb)	Manufacturing and Handicrafts	912544	932951	923883	763999	908844	734152	883172	832358	1009030	879881	869798	807977	891367	956607	931973	853701	1118536	1059509
Section D & E	Electricity, Gas, Steam, Water Supply, Sewerage, Waste Management (Utilities)	36161	36092	35573	36506	37268	36464	37977	37682	39190	36304	34915	33809	33759	35185	35947	35951	38649	38007
Section F	Construction	94494	90323	81860	88097	103312	179587	185203	211603	171234	184520	171645	121392	148356	192265	259626	336648	444425	534294
Section G	Wholesale and retail trade; repair of motor vehicles and motorcycles	395032	392704	372368	410122	441087	409436	470466	459217	520091	405253	350358	307114	306221	364433	396198	397742	507151	483060
Section H	Transportation and Storage	299800	297337	282367	308168	330622	309544	353368	346324	392008	313165	274994	245779	246300	288254	313198	316123	397884	385029
Section I	Accommodation and Food Service Activities	128902	131455	134065	136732	139459	142245	145091	147999	150969	154004	157102	162417	167912	173592	179465	185536	191813	198302
Section J	Information and Communication	11856	16541	14409	11128	11906	13431	7137	6936	8462	9315	8186	7656	7383	7763	8542	8409	10169	11316
Section K	Financial and Insurance Activities	6311	10002	9300	13306	12049	13036	15593	20381	31944	53660	52103	46439	30184	67084	57918	82247	72880	75662
Section L	Real Estate Activities	102455	102833	103224	103626	104042	104471	105249	106042	106850	107672	108511	115851	123261	130743	138301	145937	154073	162293
Section M	Professional, Scientific and Technical Activities	55681	59171	61614	62356	63812	64666	66753	55056	57129	59611	61897	62167	62599	62966	63248	63345	63661	64140
Section O	Public Administration and Defence / Social Security	134565	158964	174075	176970	178757	176699	179237	206937	248757	287500	293165	249486	296249	286110	306789	305785	246872	259692
Section P	Education	102199	107712	113249	118843	124733	131111	137765	144767	152422	253288	269168	269219	170802	170978	171338	172135	173277	174223
Section Q	Human Health and Social Work	55967	54336	60676	60577	62594	63637	65953	68619	74604	80647	83199	85243	86261	88605	92395	94152	98668	103398
Section R	Arts, Entertainment and Recreation	23436	23819	24232	24678	25158	25674	26230	26826	27466	28153	28890	28963	29071	29357	30679	31441	32680	33371
Section S	Other Service Activities	43265	45435	47773	50292	53008	55938	59102	62521	66218	70218	74552	75990	77530	79181	80953	82858	84906	87112
Section T	Activities of Households as Employers; Undifferentiated goods and Services-Producing Activities of Households For Own Use	68545	72022	75834	80038	84702	89909	95759	102372	109895	118505	128415	129726	131254	133013	135016	137281	139823	142662
<b>Total Value Added</b>	<b>GDP at Factor Prices</b>	<b>3732544</b>	<b>4001854</b>	<b>4125691</b>	<b>4029952</b>	<b>4342975</b>	<b>4169484</b>	<b>4678897</b>	<b>4574781</b>	<b>5189706</b>	<b>4911844</b>	<b>4605234</b>	<b>4213399</b>	<b>4232438</b>	<b>4755859</b>	<b>5318422</b>	<b>5237377</b>	<b>6226713</b>	<b>6544460</b>

**Table 15: Breakdown of Cypriot GDP, 1921-1938, in constant 1938 Cyprus Pounds.**

NACE rev 2 Classification	Description of Product	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
1.11	Growing of cereals (except rice), leguminous crops and oil seeds	349601	355650	381761	279054	310728	277718	309123	265343	386887	335369	251225	169624	240281	328920	382041	303851	345376	316719
1.13	Growing of vegetables and melons, roots and tubers	70221	54383	49482	55741	43370	73599	66038	63482	108493	87870	87234	73360	63922	73541	86730	89378	109775	88300
1.15	Growing of tobacco	154	538	372	221	204	1785	4447	5286	9078	3250	1354	2514	5144	17974	6651	3397	842	402
1.16	Growing of fibre crops	21148	30305	27509	41029	39771	53758	26659	27024	44134	58489	36158	14194	14056	25228	57637	34597	52232	25558
1.19	Growing of other non-perennial crops	45990	44851	49839	38157	42810	37375	48080	41580	48935	50458	42696	27175	33874	47584	54067	40916	50182	43084
1.21	Growing of grapes	47568	120760	154626	121819	183036	127065	129611	132158	134704	137250	104335	186313	132580	146815	182587	152143	88499	190412
1.23	Growing of citrus fruits	38070	39391	40759	42173	43637	45152	46719	48340	50018	51754	53550	55346	57203	59122	61105	63154	65273	67462
1.24	Growing of pome fruits and stone fruits, nuts (1.25)	7951	9915	7735	8204	6876	7518	8321	9227	9820	10457	10845	11321	12190	13475	14693	16146	17818	19243
1.26	Growing of oleaginous fruits	12151	15217	37942	118389	27624	39463	146013	15785	69169	10015	93407	8232	11441	48650	59237	16500	107723	52294
1.28	Growing of spices, aromatic, drug and pharmaceutical crops	24645	14642	20341	17309	24528	28569	28475	14149	21576	30672	21933	6899	7992	35737	42580	17154	21353	18958
1.29	Growing of other perennial crops	150422	150314	50570	98466	98419	100692	83588	130304	114146	215773	136737	75329	44613	53974	68716	64995	119204	80081
1.41	Raising of dairy cattle, buffaloes (1.42)	75416	53679	65393	54000	43626	54408	62169	78240	69833	70346	51741	49980	45440	42653	56297	56433	55674	62944
1.43	Raising of horses and other equines, camelids (1.43), sheep and goats (1.45), swine, pigs (1.46)	221534	247960	316240	239472	242143	268797	277682	359443	309643	305472	335428	329784	309793	303975	328215	324734	341966	334917
1.5	Ancillary activities on farms, distilling, rectifying and blending of spirits, manufacture of wine from grapes (11.02), manufacture of cider and other fruit wines (11.03),	138306	248523	294316	268779	341410	281147	290328	204625	236480	235475	194665	276134	204363	232970	276688	236549	149746	285590
<i>Sub-Total 1</i>	<i>Agriculture</i>	1203179	1386129	1496886	1382813	1448184	1397046	1527254	1394986	1612916	1602647	1421307	1286206	1182893	1430616	1677244	1419948	1525663	1585965
2.2	Logging / gathering of wild growing non-wood products (2.3), sawmilling and planing of wood (16.1)	2290	2488	4967	3957	6754	3174	2452	3878	4069	3487	3308	4139	5615	6669	6476	8378	9713	10040
<i>Sub-Total 2</i>	<i>Forestry</i>	<i>2290</i>	<i>2488</i>	<i>4967</i>	<i>3957</i>	<i>6754</i>	<i>3174</i>	<i>2452</i>	<i>3878</i>	<i>4069</i>	<i>3487</i>	<i>3308</i>	<i>4139</i>	<i>5615</i>	<i>6669</i>	<i>6476</i>	<i>8378</i>	<i>9713</i>	<i>10040</i>
3.11	Marine fishing, Sponge fishing	1548	4897	11969	11214	2712	2806	6894	4376	4995	3466	3789	4161	4398	7662	6180	5723	5278	5151
<i>Sub-Total 3</i>	<i>Fishing</i>	<i>1548</i>	<i>4897</i>	<i>11969</i>	<i>11214</i>	<i>2712</i>	<i>2806</i>	<i>6894</i>	<i>4376</i>	<i>4995</i>	<i>3466</i>	<i>3789</i>	<i>4161</i>	<i>4398</i>	<i>7662</i>	<i>6180</i>	<i>5723</i>	<i>5278</i>	<i>5151</i>
<b>Section A</b>	<b>Agriculture, Forestry and Fishing</b>	<b>1207017</b>	<b>1393514</b>	<b>1513823</b>	<b>1397984</b>	<b>1457649</b>	<b>1403025</b>	<b>1536600</b>	<b>1403240</b>	<b>1621980</b>	<b>1609600</b>	<b>1428404</b>	<b>1294505</b>	<b>1192905</b>	<b>1444947</b>	<b>1689899</b>	<b>1434049</b>	<b>1540654</b>	<b>1601156</b>
7.29	Mining of other non-ferrous metal ores (chrome, cuprous pyrite, copper precipitate and residues, manganese, Gold, yellow ore)	8192	20706	43652	103878	126707	107756	149242	170277	208247	169162	141683	125966	148900	128021	306505	415391	741541	1040323
<i>Sub-Total 5/6/7</i>	<i>Metal Ore Mining</i>	<i>8192</i>	<i>20706</i>	<i>43652</i>	<i>103878</i>	<i>126707</i>	<i>107756</i>	<i>149242</i>	<i>170277</i>	<i>208247</i>	<i>169162</i>	<i>141683</i>	<i>125966</i>	<i>148900</i>	<i>128021</i>	<i>306505</i>	<i>415391</i>	<i>741541</i>	<i>1040323</i>

NACE rev 2 Classification	Description of Product	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
8.11	Quarrying of ornamental and building stone, limestone, gypsum, chalk and slate, asbestos	13677	31864	27423	56927	49251	81918	131735	137967	163910	66494	45990	22716	57782	91715	92042	113520	137922	66732
8.12	Operation of gravel and sand pits; mining of clays and kaolin	0	0	0	113	101	92	97	77	73	71	103	106	57	106	55	48	56	47
9	Extraction of salt	15788	15788	15788	15788	15788	15788	15788	15788	15788	15788	15788	15788	15788	15788	15788	15788	15788	15788
8.99	Other mining and quarrying n.e.c.	16658	8284	10503	9824	12125	10905	11381	11790	13439	9033	6368	5089	8498	9148	12548	9290	15284	8344
<i>Sub-Total 8</i>	<i>Quarrying and other mining</i>	<i>46122</i>	<i>55936</i>	<i>53714</i>	<i>82652</i>	<i>77265</i>	<i>108703</i>	<i>159000</i>	<i>165623</i>	<i>193210</i>	<i>91386</i>	<i>68249</i>	<i>43699</i>	<i>82125</i>	<i>116756</i>	<i>120433</i>	<i>138645</i>	<i>169050</i>	<i>90911</i>
<b>Section B</b>	<b>Mining and Quarrying</b>	<b>54315</b>	<b>76642</b>	<b>97366</b>	<b>186530</b>	<b>203972</b>	<b>216459</b>	<b>308242</b>	<b>335900</b>	<b>401457</b>	<b>260549</b>	<b>209932</b>	<b>169665</b>	<b>231024</b>	<b>244777</b>	<b>426937</b>	<b>554036</b>	<b>910591</b>	<b>1131233</b>
10.39	Other processing and preserving of fruit and vegetables, Manufacture of fruit and vegetable juice (10.32)	0	0	0	0	0	0	103	131	348	298	233	370	353	369	391	389	397	409
10.41	Manufacture of oils, fats, margarine and similar edible fats (10.42)	3424	3499	3464	2863	3409	2753	3314	3124	3787	3298	3260	3030	3346	3630	3506	1568	2678	3975
10.52	Manufacture of ice cream	206	120	127	120	117	126	157	197	132	384	519	338	452	561	939	1220	1191	1683
10.61	Manufacture of grain mill products (including carob and sumac crushing)	143814	150450	154565	110283	126093	88795	113528	95374	134528	114560	106517	81336	100270	134674	149407	129150	173783	158750
10.71	Manufacture of bread	176310	184688	186047	161293	189293	146410	184305	180986	220947	175603	201147	204760	229065	233662	192706	171172	244736	223392
10.73	Manufacture of macaroni, noodles, couscous and similar farinaceous products	0	0	0	0	0	0	1377	1742	2135	2168	1958	1630	1734	1962	2428	2537	2132	2645
10.82	Manufacture of cocoa, chocolate and sugar confectionery	775	792	784	648	772	623	750	707	858	747	738	686	758	822	794	720	953	900
11.04	Manufacture of other non-distilled fermented beverages, beer (11.05), of malt (11.06), soft drinks, mineral waters and other bottled waters (11.07)	542	559	924	880	1474	1600	1272	1241	1257	1153	1449	1410	1499	1611	2062	2264	2533	2926
<i>Sub-Total 10/11</i>	<i>Food and Drinks Processing</i>	<i>325072</i>	<i>340108</i>	<i>345911</i>	<i>276088</i>	<i>321157</i>	<i>240307</i>	<i>304805</i>	<i>283504</i>	<i>363992</i>	<i>298211</i>	<i>315821</i>	<i>293558</i>	<i>337477</i>	<i>377291</i>	<i>352233</i>	<i>309020</i>	<i>428404</i>	<i>394679</i>
12	Manufacture of tobacco products	46196	50957	40190	44537	44969	39147	42355	40138	37499	35864	33595	30695	30134	30889	32381	34171	35972	40196
<i>Sub-Total 12</i>	<i>Tobacco Manufacturing</i>	<i>46196</i>	<i>50957</i>	<i>40190</i>	<i>44537</i>	<i>44969</i>	<i>39147</i>	<i>42355</i>	<i>40138</i>	<i>37499</i>	<i>35864</i>	<i>33595</i>	<i>30695</i>	<i>30134</i>	<i>30889</i>	<i>32381</i>	<i>34171</i>	<i>35972</i>	<i>40196</i>
13.1	Preparation and spinning of textile fibres, Weaving of textiles (13.2)	52578	48431	48052	35036	56430	60478	58860	55067	57602	66356	44069	41953	38348	34696	37152	33292	40907	38284
13.94	Manufacture of cordage, rope, twine and netting	444	444	444	444	444	444	444	444	444	444	648	432	448	145	545	611	978	1083



NACE rev 2 Classification	Description of Product	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
15.11	Tanning and dressing of leather, dressing and dyeing of fur, Manufacture of leather clothes (14.11), Manufacture of luggage, handbags and, saddlery and harness (15.12)	5632	584	1816	2205	1427	1149	3234	5511	6281	2984	3043	2424	2238	1231	1977	2005	2378	4763
<i>Sub-Total 13/14/15</i>	<i>Preparation of Textiles, Clothes and Footwear</i>	<i>58654</i>	<i>49459</i>	<i>50312</i>	<i>37685</i>	<i>58301</i>	<i>62070</i>	<i>62537</i>	<i>61022</i>	<i>64326</i>	<i>69784</i>	<i>47761</i>	<i>44809</i>	<i>41034</i>	<i>36072</i>	<i>39674</i>	<i>35908</i>	<i>44263</i>	<i>44130</i>
18.11	Printing of newspapers, Other printing (18.12), Binding and related services (18.14)	2328	2803	3064	2868	2713	2314	2305	2407	3015	3502	3626	3061	2457	2534	3009	2996	3053	2905
<i>Sub-Total 17/18</i>	<i>Paper and Printing Works</i>	<i>2328</i>	<i>2803</i>	<i>3064</i>	<i>2868</i>	<i>2713</i>	<i>2314</i>	<i>2305</i>	<i>2407</i>	<i>3015</i>	<i>3502</i>	<i>3626</i>	<i>3061</i>	<i>2457</i>	<i>2534</i>	<i>3009</i>	<i>2996</i>	<i>3053</i>	<i>2905</i>
20.41	Manufacture of soap and detergents, cleaning and polishing preparations	189	41	101	62	413	516	2593	2284	3235	4258	4927	4214	4129	5582	7911	8447	8230	8079
20.53	Manufacture of essential oils	278	95	204	67	144	100	109	70	107	71	102	59	86	78	7	214	171	202
21.1	Manufacture of basic pharmaceutical products, pharmaceutical preparations (21.2)	212	217	214	177	211	170	205	193	234	204	202	187	207	225	217	197	220	246
<i>Sub-Total 19/20/21</i>	<i>Chemical Industry</i>	<i>679</i>	<i>353</i>	<i>520</i>	<i>306</i>	<i>768</i>	<i>786</i>	<i>2908</i>	<i>2547</i>	<i>3576</i>	<i>4533</i>	<i>5230</i>	<i>4460</i>	<i>4422</i>	<i>5884</i>	<i>8134</i>	<i>8858</i>	<i>8621</i>	<i>8527</i>
23.32	Manufacture of bricks, tiles and construction products in baked clay, tiles and flags (23.31), refractory products (23.2)	2241	1005	1348	2841	4726	5194	5376	5878	7442	7371	8016	8299	8764	7874	9451	10247	11418	12692
23.41	Manufacture of ceramic household and ornamental articles, other ceramic products (23.49)	453	877	668	692	942	806	1171	1287	1485	1246	1239	897	809	759	1002	908	844	1192
23.52	Manufacture of lime and plaster	1430	1455	827	1364	1892	1205	1544	1742	1783	1353	1840	1491	1654	1325	1349	2708	2838	3223
23.61	Manufacture of concrete products for construction purposes; other articles of concrete, plaster and cement (23.69)	2608	2665	2638	2181	2596	2097	2524	2379	2884	2512	2482	2307	2548	2764	2670	2422	1860	3027
<i>Sub-Total 22/23</i>	<i>Manufacture of Construction Materials</i>	<i>6731</i>	<i>6002</i>	<i>5481</i>	<i>7077</i>	<i>10155</i>	<i>9302</i>	<i>10614</i>	<i>11285</i>	<i>13594</i>	<i>12483</i>	<i>13578</i>	<i>12994</i>	<i>13775</i>	<i>12723</i>	<i>14472</i>	<i>16286</i>	<i>16959</i>	<i>20134</i>
24.51	Casting of iron, steel (24.52), light metals (24.53)	3380	3454	3420	2827	3365	2718	3271	3084	3739	3256	3218	2991	3303	3584	3461	3140	4157	3924
<i>Sub-Total 24/25</i>	<i>Iron Founding and Metal Manufacture</i>	<i>3380</i>	<i>3454</i>	<i>3420</i>	<i>2827</i>	<i>3365</i>	<i>2718</i>	<i>3271</i>	<i>3084</i>	<i>3739</i>	<i>3256</i>	<i>3218</i>	<i>2991</i>	<i>3303</i>	<i>3584</i>	<i>3461</i>	<i>3140</i>	<i>4157</i>	<i>3924</i>
30.11	Building of ships and floating structures, pleasure and sporting boats (30.12)	0	28	12	7	19	13	11	3	7	8	2	4	8	21	25	63	0	0
32.5	Manufacture of medical and dental instruments and supplies	13641	13940	13800	11407	13580	10968	13201	12446	15087	13140	12986	12069	13329	4340	11873	19762	16595	15835

NACE rev 2 Classification	Description of Product	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
32.91	Manufacture of brooms and brushes	575	588	582	481	573	463	557	525	636	554	548	509	562	610	589	535	657	668
32.99	Other manufacturing n.e.c.	5825	5953	5893	4871	5799	4684	5637	5315	6443	5611	5546	5154	5692	6175	5964	5412	7134	6762
<i>Sub-Total 26/27/28/29/30/31/32</i>	<i>General Manufacturing</i>	<i>20042</i>	<i>20509</i>	<i>20287</i>	<i>16766</i>	<i>19971</i>	<i>16127</i>	<i>19407</i>	<i>18289</i>	<i>22173</i>	<i>19313</i>	<i>19082</i>	<i>17737</i>	<i>19591</i>	<i>11146</i>	<i>18452</i>	<i>25771</i>	<i>24386</i>	<i>23265</i>
<b>Section C a)</b>	<b>Manufacturing( Formal)</b>	<b>463081</b>	<b>473646</b>	<b>469185</b>	<b>388154</b>	<b>461398</b>	<b>372772</b>	<b>448202</b>	<b>422276</b>	<b>511915</b>	<b>446945</b>	<b>441911</b>	<b>410303</b>	<b>452194</b>	<b>480123</b>	<b>471815</b>	<b>436151</b>	<b>565814</b>	<b>537760</b>
<u>10.11</u>	<u>Processing and preserving and creation of products of meat (10.13), poultry (10.14), fish, crustaceans and molluscs (10.2)</u>	109	111	110	91	109	88	106	100	121	105	104	97	107	116	112	101	134	127
<u>10.82</u>	<u>Manufacture of cocoa, chocolate and sugar confectionery</u>	6897	7048	6977	5767	6866	5545	6675	6293	7628	6643	6566	6102	6739	7312	7061	6407	8482	8006
<i>Sub-Total 10/11</i>	<i>Food and Drinks Processing</i>	<i>7006</i>	<i>7160</i>	<i>7088</i>	<i>5859</i>	<i>6975</i>	<i>5633</i>	<i>6780</i>	<i>6392</i>	<i>7749</i>	<i>6749</i>	<i>6670</i>	<i>6199</i>	<i>6846</i>	<i>7427</i>	<i>7173</i>	<i>6509</i>	<i>8616</i>	<i>8133</i>
<u>13.91</u>	<u>Manufacture of knitted and crocheted fabrics, made-up textile articles, except apparel (13.91), carpets and rugs(13.93)</u>	50238	51338	50823	42010	50013	40393	48618	45836	55564	48391	47826	44449	49088	53258	51433	46671	61780	58318
<u>13.94</u>	<u>Manufacture of cordage, rope, twine and netting</u>	29	29	29	24	29	23	28	26	32	28	27	25	28	30	29	27	35	33
<u>14</u>	<u>Manufacture of wearing apparel</u>	124485	127211	125935	104095	123926	100089	120471	113578	137683	119907	118509	110141	121635	131969	127447	115646	153084	144505
<u>14.12</u>	<u>Manufacture of workwear, outerwear(14.13), underwear (14.14), knitted and crocheted hosiery (14.31), other knitted and crocheted apparel (14.39)</u>	2679	2737	2710	2240	2667	2154	2592	2444	2963	2580	2550	2370	2617	2840	2742	2488	3294	3109
<u>14.19</u>	<u>Manufacture of other wearing apparel and accessories</u>	2149	2196	2174	1797	2140	1728	2080	1961	2377	2070	2046	1902	2100	2278	2200	1997	2643	2495
<u>15.11</u>	<u>Tanning and dressing of leather; dressing and dyeing of fur, manufacture of leather clothes (14.11), luggage, handbags and the like, saddlery and harness (15.12)</u>	7383	7545	7469	6174	7350	5936	7145	6736	8166	7112	7029	6532	7214	7827	7559	6859	9079	8571
<u>15.2</u>	<u>Manufacture of footwear</u>	87485	89400	88504	73155	87092	70340	84664	79819	96760	84268	83285	77404	85482	92744	89566	81273	107583	101554
<i>Sub-Total 13/14/15</i>	<i>Preparation of Textiles, Clothes and Footwear</i>	<i>274447</i>	<i>280457</i>	<i>277644</i>	<i>229495</i>	<i>273215</i>	<i>220663</i>	<i>265598</i>	<i>250401</i>	<i>303544</i>	<i>264355</i>	<i>261273</i>	<i>242824</i>	<i>268164</i>	<i>290947</i>	<i>280977</i>	<i>254961</i>	<i>337498</i>	<i>318586</i>
<u>16.24</u>	<u>Manufacture of wooden containers</u>	682	697	690	570	679	548	660	622	754	657	649	603	666	723	698	633	839	792
<u>16.29</u>	<u>Manufacture of other products of wood, articles of cork, straw and plaiting materials</u>	104837	107133	106059	87666	104367	84292	101457	95652	115952	100982	99805	92757	102437	111140	107332	97394	128923	121698
<i>Sub-Total 16</i>	<i>Wood Processing</i>	<i>105519</i>	<i>107830</i>	<i>106748</i>	<i>88236</i>	<i>105046</i>	<i>84840</i>	<i>102117</i>	<i>96274</i>	<i>116706</i>	<i>101639</i>	<i>100454</i>	<i>93361</i>	<i>103104</i>	<i>111863</i>	<i>108030</i>	<i>98027</i>	<i>129761</i>	<i>122490</i>
<u>17.29</u>	<u>Manufacture of other articles of paper and</u>	46	47	46	38	46	37	44	42	51	44	44	41	45	49	47	43	56	53

NACE rev 2 Classification	Description of Product	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
	<u>paperboard</u>																		
<i>Sub-Total 17/18</i>	<i>Paper and Printing Works</i>	46	47	46	38	46	37	44	42	51	44	44	41	45	49	47	43	56	53
<u>23.52</u>	<u>Manufacture of lime and plaster (gypsum)</u>	2809	2871	2842	2349	2797	2259	2719	2563	3107	2706	2674	2486	2745	2978	2876	2610	3455	3261
<i>Sub-Total 22/23</i>	<i>Manufacture of Construction Materials</i>	2809	2871	2842	2349	2797	2259	2719	2563	3107	2706	2674	2486	2745	2978	2876	2610	3455	3261
<u>24.51</u>	<u>Casting of iron, casting of steel (24.52), casting of light metals (24.53)</u>	19877	20312	20109	16621	19788	15982	19236	18135	21984	19146	18923	17587	19422	21072	20350	18466	24444	23074
<u>25.4</u>	<u>Manufacture of weapons and ammunition</u>	1142	1167	1155	955	1137	918	1105	1042	1263	1100	1087	1010	1116	1210	1169	1061	1404	1325
<u>25.5</u>	<u>Forging, pressing, stamping and roll-forming of metal, powder metallurgy, treatment and coating of metals (25.61), machining (25.62)</u>	5247	5362	5308	4388	5224	4219	5078	4787	5803	5054	4995	4643	5127	5563	5372	4875	6453	6091
<u>25.71</u>	<u>Manufacture of cutlery</u>	579	592	586	484	577	466	561	529	641	558	552	513	566	614	593	538	712	673
<u>25.73</u>	<u>Manufacture of tools</u>	13905	14209	14067	11627	13842	11180	13456	12686	15379	13393	13237	12303	13586	14741	14236	12917	17099	16141
<i>Sub-Total 24/25</i>	<i>Iron Founding and Metal Manufacture</i>	40750	41642	41225	34076	40567	32764	39436	37180	45070	39252	38794	36055	39817	43200	41720	37857	50112	47304
<u>28.3</u>	<u>Manufacture of agricultural and forestry machinery</u>	83	85	84	69	82	67	80	76	92	80	79	73	81	88	85	77	102	96
<u>30.99</u>	<u>Manufacture of other transport equipment n.e.c.</u>	5113	5225	5172	4275	5090	4111	4948	4665	5655	4925	4867	4524	4996	5420	5234	4750	6287	5935
<u>31.03</u>	<u>Manufacture of mattresses</u>	4223	4315	4272	3531	4204	3395	4086	3853	4670	4067	4020	3736	4126	4476	4323	3923	5193	4902
<u>31.09</u>	<u>Manufacture of other furniture</u>	8146	8324	8241	6812	8109	6549	7883	7432	9009	7846	7755	7207	7959	8636	8340	7567	10017	9456
<u>32.2</u>	<u>Manufacture of musical instruments</u>	44	45	44	36	43	35	42	40	48	42	41	39	43	46	45	40	54	51
<u>32.91</u>	<u>Manufacture of brooms and brushes</u>	233	238	236	195	232	188	226	213	258	225	222	206	228	247	239	217	287	271
<u>32.99</u>	<u>Other manufacturing n.e.c.</u>	1045	1067	1057	874	1040	840	1011	953	1155	1006	994	924	1021	1107	1069	970	1285	1213
<i>Sub-Total 26/27/28/29/30/31/32</i>	<i>General Manufacturing</i>	18885	19299	19105	15792	18801	15184	18276	17231	20888	18191	17979	16709	18453	20021	19335	17544	23224	21923
<b>Section C b)</b>	<b>Handicrafts</b>	449463	459305	454699	375845	447445	361380	434970	410082	497115	432936	427887	397673	439173	476485	460157	417550	552722	521749
<b>Section Ca) + Cb)</b>	<b>Manufacturing and Handicrafts</b>	912544	932951	923883	763999	908844	734152	883172	832358	1009030	879881	869798	807977	891367	956607	931973	853701	1118536	1059509
35.11	Production, transmission (35.12), distribution (35.13), trade (35.14), of electricity, manufacture, distribution (35.22), trade of gas (35.23), water collection (35.21), treatment and supply (36), and sewerage (37); collection and disposal of waste (38)	36161	36092	35573	36506	37268	36464	37977	37682	39190	36304	34915	33809	33759	35185	35947	35951	38649	38007
<i>Sub-Total 35/36/37/38/39</i>	<i>Utilities</i>	36161	36092	35573	36506	37268	36464	37977	37682	39190	36304	34915	33809	33759	35185	35947	35951	38649	38007

NACE rev 2 Classification	Description of Product	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
<b>Section D &amp; E</b>	<b>Electricity, Gas, Steam, Water Supply, Sewerage, Waste Management (Utilities)</b>	<b>36161</b>	<b>36092</b>	<b>35573</b>	<b>36506</b>	<b>37268</b>	<b>36464</b>	<b>37977</b>	<b>37682</b>	<b>39190</b>	<b>36304</b>	<b>34915</b>	<b>33809</b>	<b>33759</b>	<b>35185</b>	<b>35947</b>	<b>35951</b>	<b>38649</b>	<b>38007</b>
41.2	Construction of residential and non-residential buildings, roads and motorways (42.11), railways and underground railways (42.12), bridges and tunnels (42.13), utility projects for fluids (42.21), utility projects for electricity and telecommunications (42.22), water projects (42.91), other civil engineering projects n.e.c. (42.99)	94494	90323	81860	88097	103312	179587	185203	211603	171234	184520	171645	121392	148356	192265	259626	336648	444425	534294
<i>Sub-Total 41</i>	<i>Construction</i>	<i>94494</i>	<i>90323</i>	<i>81860</i>	<i>88097</i>	<i>103312</i>	<i>179587</i>	<i>185203</i>	<i>211603</i>	<i>171234</i>	<i>184520</i>	<i>171645</i>	<i>121392</i>	<i>148356</i>	<i>192265</i>	<i>259626</i>	<i>336648</i>	<i>444425</i>	<i>534294</i>
<b>Section F</b>	<b>Construction</b>	<b>94494</b>	<b>90323</b>	<b>81860</b>	<b>88097</b>	<b>103312</b>	<b>179587</b>	<b>185203</b>	<b>211603</b>	<b>171234</b>	<b>184520</b>	<b>171645</b>	<b>121392</b>	<b>148356</b>	<b>192265</b>	<b>259626</b>	<b>336648</b>	<b>444425</b>	<b>534294</b>
45.11	Sale of cars and light motor vehicles, other motor vehicles (45.19), maintenance and repair of motor vehicles (45.2), wholesale of motor vehicle parts and accessories (45.31), retail of motor vehicle parts and accessories (45.32)	8114	8522	8950	9400	9872	10368	10889	11436	12011	12614	13248	14270	15372	16558	17836	19212	20695	22292
<i>Sub-Total 45</i>	<i>Sale, Maintenance and Repair of Motor Vehicles</i>	<i>8114</i>	<i>8522</i>	<i>8950</i>	<i>9400</i>	<i>9872</i>	<i>10368</i>	<i>10889</i>	<i>11436</i>	<i>12011</i>	<i>12614</i>	<i>13248</i>	<i>14270</i>	<i>15372</i>	<i>16558</i>	<i>17836</i>	<i>19212</i>	<i>20695</i>	<i>22292</i>
46	Wholesale and retail trade (47)	386918	384182	363418	400722	431215	399067	459577	447780	508080	392639	337110	292844	290849	347874	378362	378529	486456	460768
<i>Sub-Total 46</i>	<i>Wholesale and Retail Trade</i>	<i>386918</i>	<i>384182</i>	<i>363418</i>	<i>400722</i>	<i>431215</i>	<i>399067</i>	<i>459577</i>	<i>447780</i>	<i>508080</i>	<i>392639</i>	<i>337110</i>	<i>292844</i>	<i>290849</i>	<i>347874</i>	<i>378362</i>	<i>378529</i>	<i>486456</i>	<i>460768</i>
<b>Section G</b>	<b>Wholesale and retail trade; repair of motor vehicles and motorcycles</b>	<b>395032</b>	<b>392704</b>	<b>372368</b>	<b>410122</b>	<b>441087</b>	<b>409436</b>	<b>470466</b>	<b>459217</b>	<b>520091</b>	<b>405253</b>	<b>350358</b>	<b>307114</b>	<b>306221</b>	<b>364433</b>	<b>396198</b>	<b>397742</b>	<b>507151</b>	<b>483060</b>
49.1	Passenger rail transport, interurban, freight rail (49.2)	18238	18091	15572	13318	13608	13806	12647	12088	14028	15915	15392	13889	13510	13481	13322	12888	14437	16002
49.31	Urban and suburban passenger land transport	11989	13031	14165	15396	16735	18190	19772	21492	23361	25392	27600	30000	30680	32452	35082	38080	43132	47608
49.41	Freight transport by road, sea and coast (50.2), warehousing and storage (52.1)	268655	265086	251458	278289	299115	276431	319821	311575	353093	270116	230217	200022	198850	239003	261200	261355	336485	317384
<i>Sub-Total 49/50/51</i>	<i>Transport</i>	<i>298882</i>	<i>296209</i>	<i>281194</i>	<i>307003</i>	<i>329458</i>	<i>308427</i>	<i>352240</i>	<i>345155</i>	<i>390481</i>	<i>311424</i>	<i>273209</i>	<i>243912</i>	<i>243040</i>	<i>284936</i>	<i>309603</i>	<i>312323</i>	<i>394054</i>	<i>380994</i>
53.1	Postal activities under universal service obligation	917	1129	1173	1165	1164	1117	1128	1170	1527	1741	1786	1868	3260	3318	3595	3800	3831	4035
<i>Sub-Total 53</i>	<i>Postal Services</i>	<i>917</i>	<i>1129</i>	<i>1173</i>	<i>1165</i>	<i>1164</i>	<i>1117</i>	<i>1128</i>	<i>1170</i>	<i>1527</i>	<i>1741</i>	<i>1786</i>	<i>1868</i>	<i>3260</i>	<i>3318</i>	<i>3595</i>	<i>3800</i>	<i>3831</i>	<i>4035</i>
<b>Section H</b>	<b>Transportation and</b>	<b>299800</b>	<b>297337</b>	<b>282367</b>	<b>308168</b>	<b>330622</b>	<b>309544</b>	<b>353368</b>	<b>346324</b>	<b>392008</b>	<b>313165</b>	<b>274994</b>	<b>245779</b>	<b>246300</b>	<b>288254</b>	<b>313198</b>	<b>316123</b>	<b>397884</b>	<b>385029</b>

NACE rev 2 Classification	Description of Product	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
	<b>Storage</b>																		
55.1	Hotels and similar accommodation, holiday and other short-stay accommodation (55.2), restaurants and mobile food service activities (56.1), other food service activities (56.29), beverage serving activities (56.3)	128902	131455	134065	136732	139459	142245	145091	147999	150969	154004	157102	162417	167912	173592	179465	185536	191813	198302
<i>Sub-Total 55</i>	<i>Hotel, Café and Bar Services</i>	<i>128902</i>	<i>131455</i>	<i>134065</i>	<i>136732</i>	<i>139459</i>	<i>142245</i>	<i>145091</i>	<i>147999</i>	<i>150969</i>	<i>154004</i>	<i>157102</i>	<i>162417</i>	<i>167912</i>	<i>173592</i>	<i>179465</i>	<i>185536</i>	<i>191813</i>	<i>198302</i>
<b>Section I</b>	<b>Accommodation and Food Service Activities</b>	<b>128902</b>	<b>131455</b>	<b>134065</b>	<b>136732</b>	<b>139459</b>	<b>142245</b>	<b>145091</b>	<b>147999</b>	<b>150969</b>	<b>154004</b>	<b>157102</b>	<b>162417</b>	<b>167912</b>	<b>173592</b>	<b>179465</b>	<b>185536</b>	<b>191813</b>	<b>198302</b>
58.11	Book publishing, directories and mailing lists (58.12), newspapers (58.13), other publishing activities (58.19)	991	1064	1144	1229	1320	1419	1525	1638	1760	1891	2032	2183	2346	2521	2708	2910	3127	3360
<i>Sub-Total 58</i>	<i>Publishing Activities</i>	<i>991</i>	<i>1064</i>	<i>1144</i>	<i>1229</i>	<i>1320</i>	<i>1419</i>	<i>1525</i>	<i>1638</i>	<i>1760</i>	<i>1891</i>	<i>2032</i>	<i>2183</i>	<i>2346</i>	<i>2521</i>	<i>2708</i>	<i>2910</i>	<i>3127</i>	<i>3360</i>
59.14	Motion picture projection activities	244	268	295	325	358	394	433	477	524	577	635	699	769	846	931	1025	1127	1241
<i>Sub-Total 60</i>	<i>Broadcasting</i>	<i>244</i>	<i>268</i>	<i>295</i>	<i>325</i>	<i>358</i>	<i>394</i>	<i>433</i>	<i>477</i>	<i>524</i>	<i>577</i>	<i>635</i>	<i>699</i>	<i>769</i>	<i>846</i>	<i>931</i>	<i>1025</i>	<i>1127</i>	<i>1241</i>
61.1	Wired telecommunications activities	10622	15209	12970	9574	10228	11618	5180	4821	6178	6847	5519	4774	4268	4396	4902	4475	5915	6716
<i>Sub-Total 61</i>	<i>Telecommunications</i>	<i>10622</i>	<i>15209</i>	<i>12970</i>	<i>9574</i>	<i>10228</i>	<i>11618</i>	<i>5180</i>	<i>4821</i>	<i>6178</i>	<i>6847</i>	<i>5519</i>	<i>4774</i>	<i>4268</i>	<i>4396</i>	<i>4902</i>	<i>4475</i>	<i>5915</i>	<i>6716</i>
<b>Section J</b>	<b>Information and Communication</b>	<b>11856</b>	<b>16541</b>	<b>14409</b>	<b>11128</b>	<b>11906</b>	<b>13431</b>	<b>7137</b>	<b>6936</b>	<b>8462</b>	<b>9315</b>	<b>8186</b>	<b>7656</b>	<b>7383</b>	<b>7763</b>	<b>8542</b>	<b>8409</b>	<b>10169</b>	<b>11316</b>
64.19	Banking: monetary intermediation	6311	10002	9300	13306	12049	13036	15593	20381	31944	53660	52103	46439	30184	67084	57918	82247	72880	75662
<i>Sub-Total 64</i>	<i>Banking Services</i>	<i>6311</i>	<i>10002</i>	<i>9300</i>	<i>13306</i>	<i>12049</i>	<i>13036</i>	<i>15593</i>	<i>20381</i>	<i>31944</i>	<i>53660</i>	<i>52103</i>	<i>46439</i>	<i>30184</i>	<i>67084</i>	<i>57918</i>	<i>82247</i>	<i>72880</i>	<i>75662</i>
<b>Section K</b>	<b>Financial and Insurance Activities</b>	<b>6311</b>	<b>10002</b>	<b>9300</b>	<b>13306</b>	<b>12049</b>	<b>13036</b>	<b>15593</b>	<b>20381</b>	<b>31944</b>	<b>53660</b>	<b>52103</b>	<b>46439</b>	<b>30184</b>	<b>67084</b>	<b>57918</b>	<b>82247</b>	<b>72880</b>	<b>75662</b>
68.2	Renting and operating of own real estate (including implied rental income)	102455	102833	103224	103626	104042	104471	105249	106042	106850	107672	108511	115851	123261	130743	138301	145937	154073	162293
<i>Sub-Total 68</i>	<i>Real Estate and Financial Agents</i>	<i>102455</i>	<i>102833</i>	<i>103224</i>	<i>103626</i>	<i>104042</i>	<i>104471</i>	<i>105249</i>	<i>106042</i>	<i>106850</i>	<i>107672</i>	<i>108511</i>	<i>115851</i>	<i>123261</i>	<i>130743</i>	<i>138301</i>	<i>145937</i>	<i>154073</i>	<i>162293</i>
<b>Section L</b>	<b>Real Estate Activities</b>	<b>102455</b>	<b>102833</b>	<b>103224</b>	<b>103626</b>	<b>104042</b>	<b>104471</b>	<b>105249</b>	<b>106042</b>	<b>106850</b>	<b>107672</b>	<b>108511</b>	<b>115851</b>	<b>123261</b>	<b>130743</b>	<b>138301</b>	<b>145937</b>	<b>154073</b>	<b>162293</b>
69.1	Legal activities	41824	44573	46227	46128	46687	46583	47646	34854	35756	36983	37924	37835	37897	37884	37776	37472	37375	37429
<i>Sub-Total 69</i>	<i>Legal and Accounting</i>	<i>41824</i>	<i>44573</i>	<i>46227</i>	<i>46128</i>	<i>46687</i>	<i>46583</i>	<i>47646</i>	<i>34854</i>	<i>35756</i>	<i>36983</i>	<i>37924</i>	<i>37835</i>	<i>37897</i>	<i>37884</i>	<i>37776</i>	<i>37472</i>	<i>37375</i>	<i>37429</i>
71.11	Architectural activities, engineering activities and related technical consultancy (71.12)	8781	9118	9467	9831	10208	10599	11006	11428	11867	12322	12795	12990	13188	13389	13593	13801	14011	14225
<i>Sub-Total 71</i>	<i>Architectural and Engineering Activities</i>	<i>8781</i>	<i>9118</i>	<i>9467</i>	<i>9831</i>	<i>10208</i>	<i>10599</i>	<i>11006</i>	<i>11428</i>	<i>11867</i>	<i>12322</i>	<i>12795</i>	<i>12990</i>	<i>13188</i>	<i>13389</i>	<i>13593</i>	<i>13801</i>	<i>14011</i>	<i>14225</i>
74.2	Photographic activities	2484	2619	2761	2910	3068	3235	3410	3595	3790	3995	4212	4384	4562	4748	4942	5143	5353	5571
74.3	Translation and interpretation activities, other professional, scientific and technical activities n.e.c. (74.9)	2592	2861	3159	3487	3849	4249	4691	5178	5716	6310	6966	6959	6952	6944	6937	6930	6923	6915

NACE rev 2 Classification	Description of Product	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
<i>Sub-Total 74</i>	<i>Translation and Interpretation Activities, Certifying Offices</i>	5076	5480	5919	6397	6917	7484	8101	8773	9506	10306	11178	11342	11514	11692	11879	12073	12275	12486
<b>Section M</b>	<b>Professional, Scientific and Technical Activities</b>	<b>55681</b>	<b>59171</b>	<b>61614</b>	<b>62356</b>	<b>63812</b>	<b>64666</b>	<b>66753</b>	<b>55056</b>	<b>57129</b>	<b>59611</b>	<b>61897</b>	<b>62167</b>	<b>62599</b>	<b>62966</b>	<b>63248</b>	<b>63345</b>	<b>63661</b>	<b>64140</b>
84.11	General public administration activities	80837	94798	103040	102545	105943	105484	108203	112383	133474	159365	160469	137415	177080	165638	183814	188022	174284	185169
84.12	Regulation of the activities of providing health care, education, cultural services and other social services, excluding social security, regulation of and contribution to more efficient operation of businesses (84.13)	10039	12033	12545	12917	12293	11548	12545	13941	19080	22648	25687	26557	28328	28023	30460	28910	28305	30234
84.21	Foreign affairs	0	0	0	0	0	0	0	711	842	934	1510	1880	1935	2003	689	599	593	600
84.23	Justice and judicial activities	4409	4922	4688	5038	4948	4761	4688	23253	27503	28916	28584	28183	31757	32237	31945	31182	4409	4409
84.24	Public order and safety activities, fire service activities (84.24), compulsory social security activities (84.3)	39280	47211	53802	56470	55573	54906	53802	56649	67858	75637	76915	55451	57150	58209	59880	57073	39280	39280
<i>Sub-Total 84</i>	<i>Public Administration</i>	<i>134565</i>	<i>158964</i>	<i>174075</i>	<i>176970</i>	<i>178757</i>	<i>176699</i>	<i>179237</i>	<i>206937</i>	<i>248757</i>	<i>287500</i>	<i>293165</i>	<i>249486</i>	<i>296249</i>	<i>286110</i>	<i>306789</i>	<i>305785</i>	<i>246872</i>	<i>259692</i>
<b>Section O</b>	<b>Public Administration and Defence / Social Security</b>	<b>134565</b>	<b>158964</b>	<b>174075</b>	<b>176970</b>	<b>178757</b>	<b>176699</b>	<b>179237</b>	<b>206937</b>	<b>248757</b>	<b>287500</b>	<b>293165</b>	<b>249486</b>	<b>296249</b>	<b>286110</b>	<b>306789</b>	<b>305785</b>	<b>246872</b>	<b>259692</b>
85.1	Pre-primary education, primary education (85.2), general secondary education (85.31), technical and vocational secondary education (85.32), tertiary education (85.42), sports and recreation education (85.51), cultural education (85.52), other education n.e.c. (85.59)	102199	107712	113249	118843	124733	131111	137765	144767	152422	253288	269168	269219	170802	170978	171338	172135	173277	174223
<i>Sub-Total 85</i>	<i>Education</i>	<i>102199</i>	<i>107712</i>	<i>113249</i>	<i>118843</i>	<i>124733</i>	<i>131111</i>	<i>137765</i>	<i>144767</i>	<i>152422</i>	<i>253288</i>	<i>269168</i>	<i>269219</i>	<i>170802</i>	<i>170978</i>	<i>171338</i>	<i>172135</i>	<i>173277</i>	<i>174223</i>
<b>Section P</b>	<b>Education</b>	<b>102199</b>	<b>107712</b>	<b>113249</b>	<b>118843</b>	<b>124733</b>	<b>131111</b>	<b>137765</b>	<b>144767</b>	<b>152422</b>	<b>253288</b>	<b>269168</b>	<b>269219</b>	<b>170802</b>	<b>170978</b>	<b>171338</b>	<b>172135</b>	<b>173277</b>	<b>174223</b>
86.1	Hospital activities, general medical practice activities (86.31), residential care activities for mental retardation, mental health (87.2), residential care activities for the elderly and disabled (87.3)	40327	37888	43361	42333	43353	43325	44487	45913	50561	55162	56159	57780	58366	60267	63602	64895	68934	73175
86.23	Dental practice activities	5032	5526	6068	6664	7318	8036	8824	9690	10641	11686	12832	13190	13557	13934	14322	14721	15131	15552
86.22	Specialist medical practice activities (midwives), other human health activities (86.9)	10608	10923	11246	11580	11923	12277	12641	13016	13401	13799	14208	14273	14338	14404	14470	14536	14603	14670

NACE rev 2 Classification	Description of Product	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
<i>Sub-Total 86/87/88/89</i>	<i>Healthcare</i>	55967	54336	60676	60577	62594	63637	65953	68619	74604	80647	83199	85243	86261	88605	92395	94152	98668	103398
<b>Section Q</b>	<b>Human Health and Social Work</b>	55967	54336	60676	60577	62594	63637	65953	68619	74604	80647	83199	85243	86261	88605	92395	94152	98668	103398
90.01	Performing arts, support activities to performing arts (90.02), artistic creation (90.03), operation of arts facilities (90.04)	15174	15722	16297	16902	17537	18206	18911	19654	20438	21265	22140	22348	22589	22861	23166	23501	23866	24261
<i>Sub-Total 90</i>	<i>Performing Arts</i>	15174	15722	16297	16902	17537	18206	18911	19654	20438	21265	22140	22348	22589	22861	23166	23501	23866	24261
91.01	Library and archives activities, museums (91.02), operation of historical sites and buildings and similar visitor attractions (91.03), botanical and zoological gardens and nature reserves activities (91.04)	0	0	0	0	0	0	0	0	0	0	0	0	0	143	1288	1840	2835	3250
<i>Sub-Total 91</i>	<i>Cultural Activities</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	143	1288	1840	2835	3250
93.29	Other amusement and recreation activities (Prostitution)	8262	8097	7935	7776	7620	7468	7318	7172	7028	6888	6750	6615	6483	6353	6226	6101	5979	5859
<i>Sub-Total 92/93</i>	<i>Sports and Other Recreation</i>	8262	8097	7935	7776	7620	7468	7318	7172	7028	6888	6750	6615	6483	6353	6226	6101	5979	5859
<b>Section R</b>	<b>Arts, Entertainment and Recreation</b>	23436	23819	24232	24678	25158	25674	26230	26826	27466	28153	28890	28963	29071	29357	30679	31441	32680	33371
94.91	Activities of religious organisations	12153	12427	12707	12993	13285	13585	13890	14203	14523	14850	15184	14904	14628	14358	14093	13833	13577	13326
<i>Sub-Total 94</i>	<i>Religious Activities</i>	12153	12427	12707	12993	13285	13585	13890	14203	14523	14850	15184	14904	14628	14358	14093	13833	13577	13326
95.12	Repair of communication equipment, of consumer electronics (95.21), household appliances and home and garden equipment (95.22), other personal and household goods (95.29)	1557	1742	1949	2181	2440	2729	3054	3416	3822	4276	4784	5352	5988	6699	7495	8385	9381	10495
95.23	Repair of footwear and leather goods, furniture and home furnishings (95.24)	70	87	109	135	169	210	262	326	406	506	630	669	710	753	800	849	901	956
95.25	Repair of watches, clocks and jewellery	6020	5977	5934	5891	5848	5806	5764	5723	5682	5641	5600	5850	6111	6384	6669	6966	7277	7602
<i>Sub-Total 95</i>	<i>Repair Services</i>	7647	7806	7991	8207	8457	8746	9080	9465	9910	10422	11014	11871	12809	13836	14963	16200	17559	19053
96.02	Hairdressing and men's haircuts	18598	20112	21749	23520	25435	27506	29745	32167	34786	37618	40681	41473	42281	43105	43945	44801	45674	46564
96.03	Funeral and related activities																		
96.04	Physical well-being activities (bath houses)	3550	3737	3935	4143	4362	4593	4836	5092	5361	5645	5944	5995	6048	6100	6153	6207	6261	6315
96.09	Other personal service activities n.e.c. (shoe blacks)	1316	1353	1390	1429	1468	1509	1551	1594	1638	1683	1730	1747	1764	1782	1799	1817	1835	1853

NACE rev 2 Classification	Description of Product	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
<i>Sub-Total 96</i>	<i>Personal Services outside the Household</i>	23464	25202	27075	29092	31266	33608	36132	38853	41785	44946	48354	49215	50093	50987	51897	52825	53770	54732
<b>Section S</b>	<b>Other Service Activities</b>	<b>43265</b>	<b>45435</b>	<b>47773</b>	<b>50292</b>	<b>53008</b>	<b>55938</b>	<b>59102</b>	<b>62521</b>	<b>66218</b>	<b>70218</b>	<b>74552</b>	<b>75990</b>	<b>77530</b>	<b>79181</b>	<b>80953</b>	<b>82858</b>	<b>84906</b>	<b>87112</b>
97	Activities of households as employers of domestic personnel	68545	72022	75834	80038	84702	89909	95759	102372	109895	118505	128415	129726	131254	133013	135016	137281	139823	142662
<i>Sub-Total 97</i>	<i>Personal Services</i>	<i>68545</i>	<i>72022</i>	<i>75834</i>	<i>80038</i>	<i>84702</i>	<i>89909</i>	<i>95759</i>	<i>102372</i>	<i>109895</i>	<i>118505</i>	<i>128415</i>	<i>129726</i>	<i>131254</i>	<i>133013</i>	<i>135016</i>	<i>137281</i>	<i>139823</i>	<i>142662</i>
<b>Section T</b>	<b>Activities of Households as Employers; Undifferentiated goods and Services-Producing Activities of Households For Own Use</b>	<b>68545</b>	<b>72022</b>	<b>75834</b>	<b>80038</b>	<b>84702</b>	<b>89909</b>	<b>95759</b>	<b>102372</b>	<b>109895</b>	<b>118505</b>	<b>128415</b>	<b>129726</b>	<b>131254</b>	<b>133013</b>	<b>135016</b>	<b>137281</b>	<b>139823</b>	<b>142662</b>
<b>Total Value Added</b>	<b>GDP at Factor Prices</b>	<b>3732544</b>	<b>4001854</b>	<b>4125691</b>	<b>4029952</b>	<b>4342975</b>	<b>4169484</b>	<b>4678897</b>	<b>4574781</b>	<b>5189706</b>	<b>4911844</b>	<b>4605234</b>	<b>4213399</b>	<b>4232438</b>	<b>4755859</b>	<b>5318422</b>	<b>5237377</b>	<b>6226713</b>	<b>6544460</b>



## Appendix C: Maltese GDP at factor cost, 1921-1938

### Notes on the Maltese GDP:

The value added is categorised based on the NACE rev.2 nomenclature of the European Union (EUROSTAT, 2008). The European Union nomenclature divides output into broad economic sectors, labelled A to U. For example agriculture, forestry and fishing are summed as economic sector A. These sectors are in bold in the general table, while a summary table is provided below. The breakdown of GDP breaks up these sectors in industrial divisions identified by digit codes: thus agriculture is 1, forestry 2, and so on. The value added of these industrial divisions is shaded and in italics. These are broken down into industrial groups and classes, identified by three or four digits: for example, growing of cereals is 1.11, and of vegetables 1.13. Some industrial sections/divisions/groups and classes were added together if the industries were involved in similar production and a greater disaggregation was not possible. Where it was not possible to estimate a product, or where the NACE category was not applicable for Malta, the category was removed. These non-estimated sectors are just a small share of GDP. The handicraft sector was estimated separately from the manufacturing sector, and given below the formal manufacturing sector in a different shaded font, thus allowing for a duplication of some categories. Thus the total production of industry is divided in formal manufacturing and handicraft. If one is interested, for example, in evaluating total textile production one can add the digits 13, 14, 15 of both the manufacturing and the handicraft sectors. All estimates here are given in constant 1938 pounds sterling and match the estimates in the thesis; it was only Cypriot output that was adjusted upwards through PPP in Chapter 3.

**Table 16: Summary of Maltese GDP, 1921-1938, in constant 1938 Pound Sterling.**

NACE rev 2 Classification	Description of Product	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
Section A - Total	AGRICULTURE, FORESTRY AND FISHING	372866	424437	441760	487282	508524	531002	530010	515842	577392	526603	523480	507588	499427	607110	543143	449767	542685	554996
Section B	MINING AND QUARRYING	25161	60356	75896	87003	83564	99791	134861	146053	149474	144962	153038	163547	157790	145472	133906	137655	143304	142834
Section Ca) + Cb)	Manufacturing and Handicraft (TOTAL)	1371109	1494191	1590044	1681692	1679011	1705825	1701916	1596788	1715321	1658225	1721452	1754641	1846702	1727032	2009949	1732666	1872441	1941032
Section D & E	Electricity, Gas, Steam, Water Supply, Sewerage, Waste Management (Utilities)	78456	34291	34291	38825	43831	44028	48415	54179	54032	59573	58832	59390	63064	67071	69648	76748	85526	101249
Section F	Construction	92034	120988	148498	184890	210814	239299	247597	279616	301546	394718	474906	543857	580259	685005	650832	677922	673733	355449
Section G	Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles	984054	1065326	1146159	1269180	1303495	1328408	1291970	1208049	1317638	1259611	1213857	1260246	1297219	1313549	1415307	1275118	1408612	1423729
Section H	Transportation and Storage	759295	822722	885932	969379	1005025	1062766	1059695	942193	1047994	997187	972175	1001774	1029235	1051784	1140628	1057984	1171817	1220793
Section I	Accommodation and Food Service Activities	70735	72450	74260	76169	78182	80307	82549	84914	87411	90045	92825	100223	108283	117071	126658	137122	148551	161042
Section J	Information and Communication	19128	20146	21218	22348	23537	24790	26110	27499	28963	30505	32129	32472	33446	36181	36112	36547	37016	37802
Section K	Financial and Insurance Activities	14044	14565	15106	15666	16247	16850	17476	18124	18796	19494	20217	20619	21028	21446	21872	22306	22749	23201
Section L	Real Estate Activities	177478	172499	168710	165490	162636	159611	158168	157564	157755	159991	163229	169190	176823	185963	194090	201571	208765	208732
Section M	Professional, Scientific and Technical Activities	135111	139645	142097	144780	147779	150579	153517	156875	160598	164280	168449	167978	167432	166965	170059	169860	169321	169106
Section N	Administrative and Support Service Activities	12230	12279	12337	12405	12482	12570	12668	12777	12897	13028	13171	13171	13171	13171	13171	13171	4850	13171
Section O	Public Administration and Defence / Social Security	138061	159796	162823	185966	185385	183996	189490	205417	232419	244633	270588	272795	272736	293281	295256	312926	322563	347144
Section P	Education	107364	125250	127798	135690	145291	147004	150632	159371	171495	178874	192932	199798	201387	216699	219876	227194	230605	235459
Section Q	Human Health and Social Work	49598	52782	53649	55409	57414	57844	59097	60974	63535	65144	67627	68189	69042	70990	70534	72272	73524	75596
Section R	Arts, Entertainment and Recreation	54477	57803	59385	61995	64816	67547	70462	73555	76838	80289	83872	83595	83284	83090	82857	82751	82412	83052
Section S	Other Religious and Professional Organisations	61422	62024	62619	63260	63802	64414	65033	65657	66287	66923	67566	67353	67142	66931	66720	66510	66301	66093
Section S + T	Other Personal Services (From Section S) Activities of Households as Employers; Undifferentiated goods and Services-Producing Activities of Households For Own Use	202929	208326	213866	219553	225391	231385	237539	243855	250340	256998	263832	262748	261668	260592	259521	258455	257392	256335
<b>Total Value Added</b>	<b>GDP at Factor Prices</b>	<b>4725551</b>	<b>5119876</b>	<b>5436448</b>	<b>5876981</b>	<b>6017227</b>	<b>6208017</b>	<b>6237203</b>	<b>6009303</b>	<b>6490731</b>	<b>6411082</b>	<b>6554176</b>	<b>6749173</b>	<b>6949134</b>	<b>7129401</b>	<b>7520138</b>	<b>7008544</b>	<b>7522168</b>	<b>7416814</b>

**Table 17: Breakdown of Maltese GDP, 1921-1938 in constant 1938, Pound Sterling.**

NACE rev 2 Classification	Description of Product	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
1.11	Growing of cereals (except rice), leguminous crops and oil seeds	67926	58643	63301	65703	66800	72804	72331	74677	71954	73716	67032	69795	72299	75083	43948	52804	72236	64343
1.13	Growing of vegetables and melons, roots and tubers	100939	110943	141533	130326	135193	175252	172955	175122	183000	175252	175859	163950	162712	248802	139411	158710	205244	185942
1.15	Growing of tobacco	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	318	360
1.16	Growing of fibre crops	1576	3447	1141	702	3394	4630	3002	2029	3206	2243	1735	1195	242	185	117	189	164	154
1.19	Growing of other non-perennial crops	63476	49792	80304	90457	90201	98015	92908	99503	105376	99361	98691	103133	70452	81098	94227	50461	72211	96089
1.23	Growing of citrus fruits	1111	2584	2380	2554	2459	2641	2604	2141	2269	2542	2660	1032	2192	2883	2578	2116	2297	2342
1.24	Growing of pome fruits and stone fruits / nuts (1.25), growing of grapes (1.21)	24573	18249	25124	50160	41841	50103	70120	44393	87223	50331	38843	39811	54064	36698	37761	27375	32097	43030
1.28	Growing of spices, aromatic, drug and pharmaceutical crops	353	940	4681	13668	22505	10206	6918	7980	10510	11901	10305	5203	4727	9052	5986	5599	3820	3315
1.41	Raising of dairy cattle, cattle and buffaloes (1.42)	24120	41675	24955	19443	33334	28114	26321	32746	30232	30780	33646	31327	36019	40875	39987	40028	35382	38490
1.43	Raising of horses and other equines, camelids (1.43), sheep and goats (1.45), swine, pigs (1.46)	24888	56642	3221	451	26737	31275	24932	26098	23661	24442	43927	31220	37046	29352	31997	33270	36766	31914
1.5	Ancillary activities on farm, distilling, rectifying and blending of spirits, manufacture of wine from grape (11.02), manufacture of cider and other fruit wines (11.03),	3874	8955	17289	17854	13621	14679	12555	15869	16231	16069	14732	25589	24107	21798	33817	22947	25883	32748
<b>Sub-Total 1</b>	<b>Agriculture</b>	<b>312837</b>	<b>351869</b>	<b>363928</b>	<b>391318</b>	<b>436084</b>	<b>487719</b>	<b>484646</b>	<b>480558</b>	<b>533661</b>	<b>486639</b>	<b>487429</b>	<b>472256</b>	<b>463859</b>	<b>545825</b>	<b>429829</b>	<b>393498</b>	<b>486417</b>	<b>498728</b>
2.1	Silviculture and other forestry activities (pruning firewood)	2149	2578	2750	3008	3438	3094	3300	3309	7649	7520	3266	2802	2931	2931	2931	2931	2931	2931
<b>Sub-Total 2</b>	<b>Forestry</b>	<b>2149</b>	<b>2578</b>	<b>2750</b>	<b>3008</b>	<b>3438</b>	<b>3094</b>	<b>3300</b>	<b>3309</b>	<b>7649</b>	<b>7520</b>	<b>3266</b>	<b>2802</b>	<b>2931</b>	<b>2931</b>	<b>2931</b>	<b>2931</b>	<b>2931</b>	<b>2931</b>
3.11	Marine fishing, sponge fishing	57880	69990	75082	92957	69002	40189	42063	31975	36082	32444	32785	32530	32637	58354	110383	53338	53338	53338
<b>Sub-Total 3</b>	<b>Fishing</b>	<b>57880</b>	<b>69990</b>	<b>75082</b>	<b>92957</b>	<b>69002</b>	<b>40189</b>	<b>42063</b>	<b>31975</b>	<b>36082</b>	<b>32444</b>	<b>32785</b>	<b>32530</b>	<b>32637</b>	<b>58354</b>	<b>110383</b>	<b>53338</b>	<b>53338</b>	<b>53338</b>
<b>Section A - Total</b>	<b>AGRICULTURE, FORESTRY AND FISHING</b>	<b>372866</b>	<b>424437</b>	<b>441760</b>	<b>487282</b>	<b>508524</b>	<b>531002</b>	<b>530010</b>	<b>515842</b>	<b>577392</b>	<b>526603</b>	<b>523480</b>	<b>507588</b>	<b>499427</b>	<b>607110</b>	<b>543143</b>	<b>449767</b>	<b>542685</b>	<b>554996</b>
8.11	Quarrying of ornamental and building stone, limestone, gypsum, chalk and slate, asbestos	24722	59962	75450	86557	82620	98831	133838	145318	148871	144227	151962	162445	156740	143504	132069	135877	141668	141128
8.93	Extraction of salt	438	394	446	446	945	960	1023	735	604	735	1076	1102	1050	1968	1837	1778	1636	1706
<b>Sub-Total 8</b>	<b>Quarrying and other mining</b>	<b>25161</b>	<b>60356</b>	<b>75896</b>	<b>87003</b>	<b>83564</b>	<b>99791</b>	<b>134861</b>	<b>146053</b>	<b>149474</b>	<b>144962</b>	<b>153038</b>	<b>163547</b>	<b>157790</b>	<b>145472</b>	<b>133906</b>	<b>137655</b>	<b>143304</b>	<b>142834</b>
<b>Section B</b>	<b>MINING AND QUARRYING</b>	<b>25161</b>	<b>60356</b>	<b>75896</b>	<b>87003</b>	<b>83564</b>	<b>99791</b>	<b>134861</b>	<b>146053</b>	<b>149474</b>	<b>144962</b>	<b>153038</b>	<b>163547</b>	<b>157790</b>	<b>145472</b>	<b>133906</b>	<b>137655</b>	<b>143304</b>	<b>142834</b>
10.39	Other processing and preserving of fruit and vegetables, manufacture of fruit and vegetable juice (10.32)	6402	6625	6625	4103	3544	5841	5047	6197	7181	5601	4024	3503	2711	5111	11315	3492	6503	6197
10.52	Manufacture of ice cream	4282	6124	7232	8277	7525	7515	7505	7270	6186	4802	3672	3249	3249	4096	4520	4379	4379	4379
10.61	Manufacture of grain mill products (including bran and forage milling)	52755	63201	54668	55633	62967	77430	77875	60875	79910	61482	80205	79859	85159	70282	121808	50547	82636	86654

NACE rev 2 Classification	Description of Product	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
10.71	Manufacture of bread	350205	350001	345114	321079	330017	368241	375763	286537	373032	329028	396018	369853	410925	348278	482487	264063	360372	401185
10.82	Manufacture of cocoa, chocolate and sugar confectionery	2069	1945	1807	2248	2180	1147	1096	1426	1843	1624	1639	1809	1752	2295	1906	1522	1742	1937
11.04	Manufacture of other non-distilled fermented beverages, beer (11.05), malt (11.06), soft drinks, mineral waters and other bottled waters (11.07)	16962	21322	23946	26422	24639	24616	24592	29309	26743	23466	24384	29304	30564	36162	32291	37244	25513	30823
<i>Sub-Total 10/11</i>	<i>Food and Drinks Processing</i>	<i>432675</i>	<i>449218</i>	<i>439392</i>	<i>417762</i>	<i>430872</i>	<i>484790</i>	<i>491878</i>	<i>391614</i>	<i>494895</i>	<i>426003</i>	<i>509943</i>	<i>487576</i>	<i>534360</i>	<i>466224</i>	<i>654327</i>	<i>361248</i>	<i>481145</i>	<i>531175</i>
12	Manufacture of tobacco	24848	31452	34698	36769	41582	27367	29438	38112	30921	23729	26080	27647	38952	53335	49473	59659	59659	59659
<i>Sub-Total 12</i>	<i>Tobacco Manufacturing</i>	<i>24848</i>	<i>31452</i>	<i>34698</i>	<i>36769</i>	<i>41582</i>	<i>27367</i>	<i>29438</i>	<i>38112</i>	<i>30921</i>	<i>23729</i>	<i>26080</i>	<i>27647</i>	<i>38952</i>	<i>53335</i>	<i>49473</i>	<i>59659</i>	<i>59659</i>	<i>59659</i>
13.91	Manufacture of knitted and crocheted fabrics, made-up textile articles, except apparel (13.92), carpets and rugs(13.93)	783	1713	567	349	1687	2301	1492	1008	1593	1115	862	594	120	92	58	94	81	76
14.12	Manufacture of workwear, other outerwear(14.13), underwear (14.14), knitted and crocheted hosiery (14.31), other knitted and crocheted apparel (14.39)	0	0	0	0	0	0	0	0	0	0	0	0	1766	1408	1119	1343	1567	1567
14.19	Manufacture of other wearing apparel and accessories	2229	1959	4635	5305	4823	4817	4810	4660	3965	3078	2798	3022	3022	3022	3022	2854	2910	2854
<i>Sub-Total 13/14/15</i>	<i>Preparation of Textiles, Clothes and Footwear</i>	<i>3012</i>	<i>3672</i>	<i>5202</i>	<i>5654</i>	<i>6509</i>	<i>7117</i>	<i>6302</i>	<i>5668</i>	<i>5558</i>	<i>4193</i>	<i>3661</i>	<i>3616</i>	<i>4909</i>	<i>4522</i>	<i>4200</i>	<i>4291</i>	<i>4559</i>	<i>4498</i>
18.11	Printing of newspapers, Other printing (18.12), binding and related services (18.14)	14607	20601	23929	27272	25403	25386	25429	25130	22167	18274	20342	19907	19394	21838	24133	21752	21547	22316
<i>Sub-Total 17/18</i>	<i>Paper and Printing Works</i>	<i>14607</i>	<i>20601</i>	<i>23929</i>	<i>27272</i>	<i>25403</i>	<i>25386</i>	<i>25429</i>	<i>25130</i>	<i>22167</i>	<i>18274</i>	<i>20342</i>	<i>19907</i>	<i>19394</i>	<i>21838</i>	<i>24133</i>	<i>21752</i>	<i>21547</i>	<i>22316</i>
20.12	Manufacture of dyes and pigments, other inorganic basic chemicals (20.13), other organic basic chemicals (20.14), paints, varnishes and similar coatings, printing ink and mastics (20.3)	403	576	680	778	708	707	706	684	582	452	397	1874	2317	1847	1847	1847	1623	1623
20.41	Manufacture of soap and detergents, cleaning and polishing preparations	19	27	32	37	33	33	33	32	27	21	19	88	109	87	224	116	135	895
20.51	Manufacture of explosives	0	0	0	0	0	0	0	0	0	224	224	224	33	1399	1399	560	616	895
<i>Sub-Total 19/20/21</i>	<i>Chemical Industry</i>	<i>422</i>	<i>603</i>	<i>712</i>	<i>815</i>	<i>741</i>	<i>740</i>	<i>739</i>	<i>716</i>	<i>609</i>	<i>697</i>	<i>639</i>	<i>2186</i>	<i>2458</i>	<i>3333</i>	<i>3470</i>	<i>2523</i>	<i>2373</i>	<i>3414</i>
23.11	Manufacture of flat glass, shaping and processing of flat glass (23.12), hollow glass (21.13), processing of other glass, (23.19)	482	690	815	933	848	847	846	819	697	541	476	2245	2776	2213	1759	1759	1847	2111
23.41	Manufacture of ceramic household and ornamental articles, other ceramic products (23.49)	574	820	969	1109	1008	1007	1005	974	829	643	565	2669	3300	2630	2630	1175	1903	2239
23.52	Manufacture of lime and	169	241	285	326	297	296	296	287	244	189	166	786	971	774	616	895	1007	1175

NACE rev 2 Classification	Description of Product	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
	plaster																		
23.61	Manufacture of concrete products for construction purposes, other articles of concrete, plaster and cement (23.69)	5589	7993	9439	10804	9821	9808	9795	9489	8074	6268	6828	7108	7052	9066	8731	6212	8339	8227
<i>Sub-Total 22/23</i>	<i>Manufacture of Construction Materials</i>	<i>6814</i>	<i>9744</i>	<i>11508</i>	<i>13172</i>	<i>11974</i>	<i>11958</i>	<i>11942</i>	<i>11568</i>	<i>9844</i>	<i>7642</i>	<i>8035</i>	<i>12807</i>	<i>14099</i>	<i>14684</i>	<i>13735</i>	<i>10042</i>	<i>13096</i>	<i>13751</i>
24.1	Manufacture of basic iron and steel and of ferro-alloys, tubes, pipes, hollow profiles and related fittings, of steel (24.2), Cold drawing or forming of bars or wire, narrow strips (24.3)	0	0	0	0	0	0	0	0	0	0	0	0	0	1935	10729	10729	15127	6596
24.51	Casting of iron, steel (24.52), light metals (24.53)	1399	2001	2363	2705	2459	2455	2452	2375	2021	1569	1379	6510	8050	6416	5101	2199	2199	6508
25.5	Forging, pressing, stamping and roll-forming of metal; powder metallurgy, treatment and coating of metals (25.61), Machining (25.62)	482	690	815	933	848	847	846	819	697	541	476	2245	2776	3004	3166	1935	1455	2127
<i>Sub-Total 24/25</i>	<i>Iron Founding and Metal Manufacture</i>	<i>1882</i>	<i>2691</i>	<i>3178</i>	<i>3637</i>	<i>3307</i>	<i>3302</i>	<i>3298</i>	<i>3195</i>	<i>2718</i>	<i>2110</i>	<i>1855</i>	<i>8755</i>	<i>10825</i>	<i>11355</i>	<i>18996</i>	<i>14863</i>	<i>18780</i>	<i>15230</i>
29.1	Manufacture of motor vehicles, of bodies (coachwork) for motor vehicles, trailers and semi-trailers (29.2), electrical and electronic equipment for motor vehicles (29.31), other parts and accessories	4101	5865	6926	7927	7206	7197	7187	6963	5925	4599	4042	19081	23593	18806	14951	3598	3598	3598
30.11	Building of ships and floating structures, pleasure and sporting boats (30.12)	588065	662803	745033	837031	810358	785789	761977	738497	756785	774538	736898	770648	804520	751217	855002	901191	923037	949254
32.12	Manufacture of jewellery and related articles, imitation jewellery and related articles (32.13)	6352	9083	10727	12278	11162	11147	11132	10784	9176	7124	7299	7299	8355	8707	11521	4573	4661	7739
32.99	Other manufacturing n.e.c.	1196	1710	2019	2311	2101	2098	2095	2030	1727	1341	1178	5562	6878	5482	4358	4477	5149	4869
<i>Sub-Total 26/27/28/29/30/31/32</i>	<i>General Manufacturing</i>	<i>599713</i>	<i>679461</i>	<i>764705</i>	<i>859548</i>	<i>830827</i>	<i>806231</i>	<i>782392</i>	<i>758273</i>	<i>773613</i>	<i>787602</i>	<i>749418</i>	<i>802591</i>	<i>843346</i>	<i>784212</i>	<i>885832</i>	<i>913839</i>	<i>936445</i>	<i>965459</i>
<b>Section C a)</b>	<b>Manufacturing (Formal)</b>	<b>1083973</b>	<b>1197442</b>	<b>1283325</b>	<b>1364629</b>	<b>1351215</b>	<b>1366892</b>	<b>1351417</b>	<b>1234276</b>	<b>1340326</b>	<b>1270250</b>	<b>1319972</b>	<b>1365084</b>	<b>1468342</b>	<b>1359502</b>	<b>1654166</b>	<b>1388216</b>	<b>1537604</b>	<b>1615502</b>
<u>13.91</u>	<u>Manufacture of knitted and crocheted fabrics, made-up textile articles, except apparel (13.92), carpets and rugs(13.93)</u>	<u>2956</u>	<u>3110</u>	<u>3270</u>	<u>3438</u>	<u>3612</u>	<u>3793</u>	<u>3982</u>	<u>4179</u>	<u>4384</u>	<u>4598</u>	<u>4821</u>	<u>4845</u>	<u>4875</u>	<u>4904</u>	<u>4907</u>	<u>4910</u>	<u>4940</u>	<u>4969</u>
<u>14</u>	<u>Manufacture of wearing apparel</u>	<u>100738</u>	<u>104663</u>	<u>108716</u>	<u>112899</u>	<u>117220</u>	<u>121682</u>	<u>126290</u>	<u>131052</u>	<u>135971</u>	<u>141055</u>	<u>146309</u>	<u>140922</u>	<u>135801</u>	<u>130857</u>	<u>125793</u>	<u>120918</u>	<u>116523</u>	<u>112280</u>
<u>14.19</u>	<u>Manufacture of other wearing apparel and accessories</u>	<u>2335</u>	<u>2522</u>	<u>2724</u>	<u>2941</u>	<u>3175</u>	<u>3426</u>	<u>3697</u>	<u>3989</u>	<u>4303</u>	<u>4641</u>	<u>5005</u>	<u>5032</u>	<u>5063</u>	<u>5093</u>	<u>5111</u>	<u>5129</u>	<u>5160</u>	<u>5191</u>

NACE rev 2 Classification	Description of Product	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
15.11	Tanning and dressing of leather; dressing and dyeing of fur; manufacture of leather clothes (14.11), luggage, handbags and the like, saddlery and harness (15.12)	2951	2870	2821	2799	2800	2819	2855	2904	2966	3038	3119	2771	2468	2202	1958	1745	1568	1413
15.2	Manufacture of footwear	64250	65492	66741	67999	69267	70544	71831	73130	74441	75764	77101	74481	71986	69570	67075	64665	62499	60401
Sub-Total 13/14/15	Preparation of Textiles, Clothes and Footwear	173230	178658	184273	190076	196072	202263	208655	215254	222065	229096	236354	228052	220193	212626	204845	197367	190689	184254
16.24	Manufacture of wooden containers	3984	4171	4364	4564	4771	4985	5207	5438	5676	5923	6179	5852	5548	5259	4959	4675	4432	4201
16.29	Manufacture of other products of wood, articles of cork, straw and plaiting materials	62804	66211	69784	73532	77465	81592	85925	90475	95253	100271	105543	102747	100136	97575	94575	91655	89324	87040
Sub-total 16	Wood Processing	66787	70381	74148	78096	82236	86578	91133	95912	100929	106194	111722	108599	105684	102835	99534	96330	93757	91241
25.4	Manufacture of weapons and ammunition	353	338	324	310	296	283	270	258	246	235	224	231	239	247	253	260	269	278
25.5	Forging, pressing, stamping and roll-forming of metal; powder metallurgy, treatment and coating of metals (25.61), Machining (25.62)	1754	1738	1721	1703	1685	1667	1648	1628	1609	1589	1569	1553	1539	1525	1503	1482	1469	1455
25.71	Manufacture of cutlery	143	161	180	201	225	252	282	316	353	395	442	455	469	484	498	512	528	545
25.73	Manufacture of tools	42833	43402	43956	44496	45023	45538	46041	46533	47016	47489	47954	47604	47310	47009	46463	45916	45631	45341
Sub-Total 24/25	Iron Founding and Metal Manufacture	45084	45639	46180	46710	47229	47739	48241	48735	49224	49708	50188	49844	49557	49265	48718	48171	47897	47619
30.99	Manufacture of other transport equipment n.e.c.	540	583	629	678	732	788	849	915	985	1060	1141	1006	888	784	688	604	533	470
32.2	Manufacture of musical instruments	205	244	292	348	415	495	590	704	839	1000	1192	1193	1194	1195	1194	1193	1194	1196
32.99	Other manufacturing n.e.c.	1290	1244	1198	1154	1111	1070	1030	991	954	918	883	863	844	825	805	785	767	750
Sub-Total 26, 27, 28, 29, 30, 31, 32	General Manufacturing	2035	2071	2119	2181	2258	2354	2470	2610	2778	2978	3215	3061	2926	2804	2686	2581	2494	2416
Section C b)	Handicraft	287136	296749	306719	317063	327795	338934	350499	362511	374995	387976	401480	389557	378360	367530	355783	344449	334837	325530
Section Ca) + Cb)	Manufacturing and Handicraft (TOTAL)	1371109	1494191	1590044	1681692	1679011	1705825	1701916	1596788	1715321	1658225	1721452	1754641	1846702	1727032	2009949	1732666	1872441	1941032
35.11	Production, transmission (35.12), distribution (35.13), and trade (35.14) of electricity, manufacture, distribution (35.22), trade (35.23) of gas (35.21), water collection, treatment and supply (36), and sewerage (37): collection and disposal of waste (38)	78456	34291	34291	38825	43831	44028	48415	54179	54032	59573	58832	59390	63064	67071	69648	76748	85526	101249
Sub-Total 35, 36, 37, 38, 39	Utilities	78456	34291	34291	38825	43831	44028	48415	54179	54032	59573	58832	59390	63064	67071	69648	76748	85526	101249
Section D & E	Electricity, Gas, Steam, Water Supply, Sewerage, Waste Management (Utilities)	78456	34291	34291	38825	43831	44028	48415	54179	54032	59573	58832	59390	63064	67071	69648	76748	85526	101249

NACE rev 2 Classification	Description of Product	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
41.2	Construction of residential and non-residential buildings, roads and motorways (42.11), railways and underground railways (42.12), bridges and tunnels (42.13), utility projects for fluids (42.21), utility projects for electricity and telecommunications (42.22), water projects (42.91), other civil engineering projects n.e.c. (42.99)	92034	120988	148498	184890	210814	239299	247597	279616	301546	394718	474906	543857	580259	685005	650832	677922	673733	355449
<i>Sub-Total 41</i>	<i>Construction</i>	<i>92034</i>	<i>120988</i>	<i>148498</i>	<i>184890</i>	<i>210814</i>	<i>239299</i>	<i>247597</i>	<i>279616</i>	<i>301546</i>	<i>394718</i>	<i>474906</i>	<i>543857</i>	<i>580259</i>	<i>685005</i>	<i>650832</i>	<i>677922</i>	<i>673733</i>	<i>355449</i>
<b>Section F</b>	<b>Construction</b>	<b>92034</b>	<b>120988</b>	<b>148498</b>	<b>184890</b>	<b>210814</b>	<b>239299</b>	<b>247597</b>	<b>279616</b>	<b>301546</b>	<b>394718</b>	<b>474906</b>	<b>543857</b>	<b>580259</b>	<b>685005</b>	<b>650832</b>	<b>677922</b>	<b>673733</b>	<b>355449</b>
45.11	Sale of cars and light motor vehicles. Sale of other motor vehicles (45.19), wholesale of motor vehicle parts and accessories (45.31), retail of motor vehicle parts and accessories (45.32)	27915	29855	31931	34150	36523	39062	41777	44681	47786	51108	54660	54660	54660	54660	54660	54660	54660	54660
<i>Sub-Total 45</i>	<i>Sale, Maintenance and Repair of Motor Vehicles</i>	<i>27915</i>	<i>29855</i>	<i>31931</i>	<i>34150</i>	<i>36523</i>	<i>39062</i>	<i>41777</i>	<i>44681</i>	<i>47786</i>	<i>51108</i>	<i>54660</i>	<i>54660</i>	<i>54660</i>	<i>54660</i>	<i>54660</i>	<i>54660</i>	<i>54660</i>	<i>54660</i>
46	Wholesale and retail trade (47)	956139	1035471	1114228	1235030	1266971	1289346	1250193	1163369	1269852	1208504	1159197	1205586	1242559	1258889	1360648	1220458	1353952	1369069
<i>Sub-Total 46, 47</i>	<i>Wholesale and Retail Trade</i>	<i>956139</i>	<i>1035471</i>	<i>1114228</i>	<i>1235030</i>	<i>1266971</i>	<i>1289346</i>	<i>1250193</i>	<i>1163369</i>	<i>1269852</i>	<i>1208504</i>	<i>1159197</i>	<i>1205586</i>	<i>1242559</i>	<i>1258889</i>	<i>1360648</i>	<i>1220458</i>	<i>1353952</i>	<i>1369069</i>
<b>Section G</b>	<b>Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles</b>	<b>984054</b>	<b>1065326</b>	<b>1146159</b>	<b>1269180</b>	<b>1303495</b>	<b>1328408</b>	<b>1291970</b>	<b>1208049</b>	<b>1317638</b>	<b>1259611</b>	<b>1213857</b>	<b>1260246</b>	<b>1297219</b>	<b>1313549</b>	<b>1415307</b>	<b>1275118</b>	<b>1408612</b>	<b>1423729</b>
49.1	Passenger rail transport, interurban, freight(49.2)	11371	8242	7698	9280	9506	9846	10603	11301	9569	9189	8624	0	0	0	0	0		0
49.31	Urban and suburban passenger land transport	51715	56212	61100	66414	72189	78466	85290	92707	100769	109531	119056	129410	132340	139987	151328	164263	186054	205360
49.41	Freight transport by road, sea and coast, (50.2), warehousing and storage (52.1)	682956	739622	795877	882164	904980	920961	892995	830978	907037	863217	827998	861133	887542	899206	971891	871756	967109	977906
<i>Sub-Total 49, 50, 51</i>	<i>Transport</i>	<i>746042</i>	<i>804076</i>	<i>864676</i>	<i>957857</i>	<i>986675</i>	<i>1009274</i>	<i>988888</i>	<i>934985</i>	<i>1017375</i>	<i>981938</i>	<i>955678</i>	<i>990542</i>	<i>1019883</i>	<i>1039193</i>	<i>1123219</i>	<i>1036019</i>	<i>1153163</i>	<i>1183267</i>
53.1	Postal activities under universal service obligation	13253	18646	21256	11522	18350	53492	70807	7208	30619	15250	16496	11232	9352	12591	17409	21966	18654	37526
<i>Sub-Total 53</i>	<i>Postal Services</i>	<i>13253</i>	<i>18646</i>	<i>21256</i>	<i>11522</i>	<i>18350</i>	<i>53492</i>	<i>70807</i>	<i>7208</i>	<i>30619</i>	<i>15250</i>	<i>16496</i>	<i>11232</i>	<i>9352</i>	<i>12591</i>	<i>17409</i>	<i>21966</i>	<i>18654</i>	<i>37526</i>
<b>Section H</b>	<b>Transportation and Storage</b>	<b>759295</b>	<b>822722</b>	<b>885932</b>	<b>969379</b>	<b>1005025</b>	<b>1062766</b>	<b>1059695</b>	<b>942193</b>	<b>1047994</b>	<b>997187</b>	<b>972175</b>	<b>1001774</b>	<b>1029235</b>	<b>1051784</b>	<b>1140628</b>	<b>1057984</b>	<b>1171817</b>	<b>1220793</b>
55.1	Hotels and similar accommodation, holiday and other short-stay (55.2), restaurants and mobile food service activities (56.1), other food service activities (56.29), beverage serving activities (56.3)	70735	72450	74260	76169	78182	80307	82549	84914	87411	90045	92825	100223	108283	117071	126658	137122	148551	161042
<i>Sub-Total 55</i>	<i>Hotel, Café and Bar Services</i>	<i>70735</i>	<i>72450</i>	<i>74260</i>	<i>76169</i>	<i>78182</i>	<i>80307</i>	<i>82549</i>	<i>84914</i>	<i>87411</i>	<i>90045</i>	<i>92825</i>	<i>100223</i>	<i>108283</i>	<i>117071</i>	<i>126658</i>	<i>137122</i>	<i>148551</i>	<i>161042</i>
<b>Section I</b>	<b>Accommodation and Food Service Activities</b>	<b>70735</b>	<b>72450</b>	<b>74260</b>	<b>76169</b>	<b>78182</b>	<b>80307</b>	<b>82549</b>	<b>84914</b>	<b>87411</b>	<b>90045</b>	<b>92825</b>	<b>100223</b>	<b>108283</b>	<b>117071</b>	<b>126658</b>	<b>137122</b>	<b>148551</b>	<b>161042</b>

NACE rev 2 Classification	Description of Product	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
59.14	Motion picture projection activities	19128	20146	21218	22348	23537	24790	26110	27499	28963	30505	32129	31980	31833	31686	31539	31393	31248	31104
<i>Sub-Total 60</i>	<i>Broadcasting</i>	<i>19128</i>	<i>20146</i>	<i>21218</i>	<i>22348</i>	<i>23537</i>	<i>24790</i>	<i>26110</i>	<i>27499</i>	<i>28963</i>	<i>30505</i>	<i>32129</i>	<i>31980</i>	<i>31833</i>	<i>31686</i>	<i>31539</i>	<i>31393</i>	<i>31248</i>	<i>31104</i>
62	Other telecommunications activities	0	0	0	0	0	0	0	0	0	0	0	491	1613	4495	4573	5153	5767	6698
<i>Sub-Total 61</i>	<i>Telecommunications</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>491</i>	<i>1613</i>	<i>4495</i>	<i>4573</i>	<i>5153</i>	<i>5767</i>	<i>6698</i>
<b>Section J</b>	<b>Information and Communication</b>	<b>19128</b>	<b>20146</b>	<b>21218</b>	<b>22348</b>	<b>23537</b>	<b>24790</b>	<b>26110</b>	<b>27499</b>	<b>28963</b>	<b>30505</b>	<b>32129</b>	<b>32472</b>	<b>33446</b>	<b>36181</b>	<b>36112</b>	<b>36547</b>	<b>37016</b>	<b>37802</b>
64.19	Banking: monetary intermediation	14044	14565	15106	15666	16247	16850	17476	18124	18796	19494	20217	20619	21028	21446	21872	22306	22749	23201
<i>Sub-Total 64</i>	<i>Banking Services</i>	<i>14044</i>	<i>14565</i>	<i>15106</i>	<i>15666</i>	<i>16247</i>	<i>16850</i>	<i>17476</i>	<i>18124</i>	<i>18796</i>	<i>19494</i>	<i>20217</i>	<i>20619</i>	<i>21028</i>	<i>21446</i>	<i>21872</i>	<i>22306</i>	<i>22749</i>	<i>23201</i>
<b>Section K</b>	<b>Financial and Insurance Activities</b>	<b>14044</b>	<b>14565</b>	<b>15106</b>	<b>15666</b>	<b>16247</b>	<b>16850</b>	<b>17476</b>	<b>18124</b>	<b>18796</b>	<b>19494</b>	<b>20217</b>	<b>20619</b>	<b>21028</b>	<b>21446</b>	<b>21872</b>	<b>22306</b>	<b>22749</b>	<b>23201</b>
68.2	Renting and operating of own real estate (including implied rental income)	177478	172499	168710	165490	162636	159611	158168	157564	157755	159991	163229	169190	176823	185963	194090	201571	208765	208732
<i>Sub-Total 68</i>	<i>Real Estate and Financial Agents</i>	<i>177478</i>	<i>172499</i>	<i>168710</i>	<i>165490</i>	<i>162636</i>	<i>159611</i>	<i>158168</i>	<i>157564</i>	<i>157755</i>	<i>159991</i>	<i>163229</i>	<i>169190</i>	<i>176823</i>	<i>185963</i>	<i>194090</i>	<i>201571</i>	<i>208765</i>	<i>208732</i>
<b>Section L</b>	<b>Real Estate Activities</b>	<b>177478</b>	<b>172499</b>	<b>168710</b>	<b>165490</b>	<b>162636</b>	<b>159611</b>	<b>158168</b>	<b>157564</b>	<b>157755</b>	<b>159991</b>	<b>163229</b>	<b>169190</b>	<b>176823</b>	<b>185963</b>	<b>194090</b>	<b>201571</b>	<b>208765</b>	<b>208732</b>
69.1	Legal activities	66105	67863	67410	67048	66859	66319	65759	65453	65338	65000	64959	64502	63970	63518	66626	66442	65917	65716
<i>Sub-Total 69</i>	<i>Legal and Accounting</i>	<i>66105</i>	<i>67863</i>	<i>67410</i>	<i>67048</i>	<i>66859</i>	<i>66319</i>	<i>65759</i>	<i>65453</i>	<i>65338</i>	<i>65000</i>	<i>64959</i>	<i>64502</i>	<i>63970</i>	<i>63518</i>	<i>66626</i>	<i>66442</i>	<i>65917</i>	<i>65716</i>
71.11	Architectural activities, engineering activities and related technical consultancy (71.12)	58052	60815	63709	66742	69918	73245	76731	80383	84209	88217	92415	92415	92415	92415	92415	92415	92415	92415
<i>Sub-Total 71</i>	<i>Architectural and Engineering Activities</i>	<i>58052</i>	<i>60815</i>	<i>63709</i>	<i>66742</i>	<i>69918</i>	<i>73245</i>	<i>76731</i>	<i>80383</i>	<i>84209</i>	<i>88217</i>	<i>92415</i>	<i>92415</i>	<i>92415</i>	<i>92415</i>	<i>92415</i>	<i>92415</i>	<i>92415</i>	<i>92415</i>
74.2	Photographic activities	10366	10378	10390	10402	10414	10426	10439	10451	10463	10475	10487	10473	10458	10444	10430	10415	10401	10387
<i>Sub-Total 74</i>	<i>Translation and Interpretation Activities, Certifying Offices</i>	<i>10366</i>	<i>10378</i>	<i>10390</i>	<i>10402</i>	<i>10414</i>	<i>10426</i>	<i>10439</i>	<i>10451</i>	<i>10463</i>	<i>10475</i>	<i>10487</i>	<i>10473</i>	<i>10458</i>	<i>10444</i>	<i>10430</i>	<i>10415</i>	<i>10401</i>	<i>10387</i>
75	Veterinary activities	588	588	588	588	588	588	588	588	588	588	588	588	588	588	588	588	588	588
<i>Sub-Total 75</i>	<i>Veterinary Activities</i>	<i>588</i>	<i>588</i>	<i>588</i>	<i>588</i>	<i>588</i>	<i>588</i>	<i>588</i>	<i>588</i>	<i>588</i>	<i>588</i>	<i>588</i>	<i>588</i>	<i>588</i>	<i>588</i>	<i>588</i>	<i>588</i>	<i>588</i>	<i>588</i>
<b>Section M</b>	<b>Professional, Scientific and Technical Activities</b>	<b>135111</b>	<b>139645</b>	<b>142097</b>	<b>144780</b>	<b>147779</b>	<b>150579</b>	<b>153517</b>	<b>156875</b>	<b>160598</b>	<b>164280</b>	<b>168449</b>	<b>167978</b>	<b>167432</b>	<b>166965</b>	<b>170059</b>	<b>169860</b>	<b>169321</b>	<b>169106</b>
79.11	Travel agency activities, tour operator activities (79.12)	1218	1159	1103	1050	1000	952	906	863	821	782	744	744	744	744	744	744	744	744
80.1	Private security activities, Security systems service activities (80.2), combined facilities support activities (81.1)	2489	2616	2751	2892	3040	3196	3360	3533	3714	3905	4106	4106	4106	4106	4106	4106	4106	4106
<i>Sub-Total 77/79/80/81</i>	<i>Civil Administrative and Support Service Activities</i>	<i>3706</i>	<i>3775</i>	<i>3854</i>	<i>3942</i>	<i>4040</i>	<i>4148</i>	<i>4267</i>	<i>4396</i>	<i>4536</i>	<i>4687</i>	<i>4850</i>	<i>4850</i>	<i>4850</i>	<i>4850</i>	<i>4850</i>	<i>4850</i>	<i>4850</i>	<i>4850</i>
82.99	Other business support service activities n.e.c. (auctioneres, weighers)	8524	8503	8483	8463	8442	8422	8402	8381	8361	8341	8321	8321	8321	8321	8321	8321	0	8321
<i>Sub- Total 82</i>	<i>Other Business Support Services</i>	<i>8524</i>	<i>8503</i>	<i>8483</i>	<i>8463</i>	<i>8442</i>	<i>8422</i>	<i>8402</i>	<i>8381</i>	<i>8361</i>	<i>8341</i>	<i>8321</i>	<i>8321</i>	<i>8321</i>	<i>8321</i>	<i>8321</i>	<i>8321</i>	<i>0</i>	<i>8321</i>
<b>Section N</b>	<b>Administrative and Support Service Activities</b>	<b>12230</b>	<b>12279</b>	<b>12337</b>	<b>12405</b>	<b>12482</b>	<b>12570</b>	<b>12668</b>	<b>12777</b>	<b>12897</b>	<b>13028</b>	<b>13171</b>	<b>13171</b>	<b>13171</b>	<b>13171</b>	<b>13171</b>	<b>13171</b>	<b>4850</b>	<b>13171</b>
84.11	General public administration activities	56889	67324	67820	83340	75921	75594	78751	84784	97337	102571	113006	114556	117552	126364	128029	136653	142748	164584



NACE rev 2 Classification	Description of Product	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
84.12	Regulation of the activities of providing health care, education, cultural services and other social services, excluding social security, regulation of and contribution to more efficient operation of businesses (84.13)	26666	31906	32121	33760	36898	36688	38071	42194	48044	51745	57688	58712	58034	61380	64689	69139	71546	73359
84.23	Justice and judicial activities	17635	15256	17258	17697	18791	17940	18372	19290	21597	20727	23768	23362	23308	26000	22678	23777	25609	25149
84.24	Public order and safety activities, fire service activities (84.24), compulsory social security activities (84.3)	36871	45310	45623	51169	53774	53773	54296	59149	65441	69591	76126	76165	73842	79537	79860	83357	82660	84053
<i>Sub-Total 84</i>	<i>Public Administration</i>	<i>138061</i>	<i>159796</i>	<i>162823</i>	<i>185966</i>	<i>185385</i>	<i>183996</i>	<i>189490</i>	<i>205417</i>	<i>232419</i>	<i>244633</i>	<i>270588</i>	<i>272795</i>	<i>272736</i>	<i>293281</i>	<i>295256</i>	<i>312926</i>	<i>322563</i>	<i>347144</i>
<b>Section O</b>	<b>Public Administration and Defence / Social Security</b>	<b>138061</b>	<b>159796</b>	<b>162823</b>	<b>185966</b>	<b>185385</b>	<b>183996</b>	<b>189490</b>	<b>205417</b>	<b>232419</b>	<b>244633</b>	<b>270588</b>	<b>272795</b>	<b>272736</b>	<b>293281</b>	<b>295256</b>	<b>312926</b>	<b>322563</b>	<b>347144</b>
85.1	Pre-primary education, primary education (85.2), general secondary education (85.31), technical and vocational secondary education (85.32), tertiary education (85.42), sports and recreation education (85.51), cultural education (85.52), other education n.e.c. (85.59)	107364	125250	127798	135690	145291	147004	150632	159371	171495	178874	192932	199798	201387	216699	219876	227194	230605	235459
<i>Sub-Total 85</i>	<i>Education</i>	<i>107364</i>	<i>125250</i>	<i>127798</i>	<i>135690</i>	<i>145291</i>	<i>147004</i>	<i>150632</i>	<i>159371</i>	<i>171495</i>	<i>178874</i>	<i>192932</i>	<i>199798</i>	<i>201387</i>	<i>216699</i>	<i>219876</i>	<i>227194</i>	<i>230605</i>	<i>235459</i>
<b>Section P</b>	<b>Education</b>	<b>107364</b>	<b>125250</b>	<b>127798</b>	<b>135690</b>	<b>145291</b>	<b>147004</b>	<b>150632</b>	<b>159371</b>	<b>171495</b>	<b>178874</b>	<b>192932</b>	<b>199798</b>	<b>201387</b>	<b>216699</b>	<b>219876</b>	<b>227194</b>	<b>230605</b>	<b>235459</b>
86.1	Hospital activities, general medical practice activities (86.31), residential care activities for mental retardation, mental health and substance abuse (87.2), residential care activities for the elderly and disabled (87.3)	31943	34720	35149	36437	37934	37816	38477	39714	41583	42443	44115	44456	45075	46776	46061	47526	48491	50262
86.23	Dental practice activities	3388	3707	4057	4439	4858	5316	5817	6365	6965	7621	8340	8179	8022	7868	7716	7568	7422	7279
87.1	Residential nursing care activities, other residential care activities (87.9)	14267	14355	14444	14533	14622	14713	14803	14895	14987	15079	15172	15554	15945	16346	16757	17179	17611	18054
<i>Sub-Total 86/87/88/89</i>	<i>Healthcare</i>	<i>49598</i>	<i>52782</i>	<i>53649</i>	<i>55409</i>	<i>57414</i>	<i>57844</i>	<i>59097</i>	<i>60974</i>	<i>63535</i>	<i>65144</i>	<i>67627</i>	<i>68189</i>	<i>69042</i>	<i>70990</i>	<i>70534</i>	<i>72272</i>	<i>73524</i>	<i>75596</i>
<b>Section Q</b>	<b>Human Health and Social Work</b>	<b>49598</b>	<b>52782</b>	<b>53649</b>	<b>55409</b>	<b>57414</b>	<b>57844</b>	<b>59097</b>	<b>60974</b>	<b>63535</b>	<b>65144</b>	<b>67627</b>	<b>68189</b>	<b>69042</b>	<b>70990</b>	<b>70534</b>	<b>72272</b>	<b>73524</b>	<b>75596</b>
90.01	Performing arts, support activities to performing arts (90.02), artistic creation (90.03), operation of arts facilities (90.04)	50297	52557	54930	57421	60037	62783	65668	68698	71880	75223	78735	78438	78142	77848	77555	77264	76974	76685
<i>Sub-Total 90</i>	<i>Performing Arts</i>	<i>50297</i>	<i>52557</i>	<i>54930</i>	<i>57421</i>	<i>60037</i>	<i>62783</i>	<i>65668</i>	<i>68698</i>	<i>71880</i>	<i>75223</i>	<i>78735</i>	<i>78438</i>	<i>78142</i>	<i>77848</i>	<i>77555</i>	<i>77264</i>	<i>76974</i>	<i>76685</i>

NACE rev 2 Classification	Description of Product	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
91.01	Library and archives activities, museums (91.02), operation of historical sites and buildings and similar visitor attractions (91.03), botanical and zoological gardens and nature reserves activities (91.04)	527	1593	802	921	1126	1110	1141	1205	1305	1413	1485	1504	1488	1589	1649	1834	1785	1916
<i>Sub-Total 91</i>	<i>Cultural Activities</i>	<i>527</i>	<i>1593</i>	<i>802</i>	<i>921</i>	<i>1126</i>	<i>1110</i>	<i>1141</i>	<i>1205</i>	<i>1305</i>	<i>1413</i>	<i>1485</i>	<i>1504</i>	<i>1488</i>	<i>1589</i>	<i>1649</i>	<i>1834</i>	<i>1785</i>	<i>1916</i>
92	Gambling and betting activities, operation of sports facilities (93.11), activities of sport clubs (93.12), fitness facilities (93.13), other sports activities (93.19), activities of amusement parks (93.21)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	797
93.29	Other amusement and recreation activities (Prostitution)	3653	3653	3653	3653	3653	3653	3653	3653	3653	3653	3653	3653	3653	3653	3653	3653	3653	3653
<i>Sub-Total 92/93</i>	<i>Sports and Other Recreation</i>	<i>3653</i>	<i>3653</i>	<i>3653</i>	<i>3653</i>	<i>3653</i>	<i>3653</i>	<i>3653</i>	<i>3653</i>	<i>3653</i>	<i>3653</i>	<i>3653</i>	<i>3653</i>	<i>3653</i>	<i>3653</i>	<i>3653</i>	<i>3653</i>	<i>3653</i>	<i>4451</i>
<b>Section R</b>	<b>Arts, Entertainment and Recreation</b>	<b>54477</b>	<b>57803</b>	<b>59385</b>	<b>61995</b>	<b>64816</b>	<b>67547</b>	<b>70462</b>	<b>73555</b>	<b>76838</b>	<b>80289</b>	<b>83872</b>	<b>83595</b>	<b>83284</b>	<b>83090</b>	<b>82857</b>	<b>82751</b>	<b>82412</b>	<b>83052</b>
94.91	Activities of religious organisations	61422	62024	62619	63260	63802	64414	65033	65657	66287	66923	67566	67353	67142	66931	66720	66510	66301	66093
<i>Sub-Total 94</i>	<i>Religious Activities</i>	<i>61422</i>	<i>62024</i>	<i>62619</i>	<i>63260</i>	<i>63802</i>	<i>64414</i>	<i>65033</i>	<i>65657</i>	<i>66287</i>	<i>66923</i>	<i>67566</i>	<i>67353</i>	<i>67142</i>	<i>66931</i>	<i>66720</i>	<i>66510</i>	<i>66301</i>	<i>66093</i>
<b>Section S</b>	<b>Other Religious and Professional Organisations</b>	<b>61422</b>	<b>62024</b>	<b>62619</b>	<b>63260</b>	<b>63802</b>	<b>64414</b>	<b>65033</b>	<b>65657</b>	<b>66287</b>	<b>66923</b>	<b>67566</b>	<b>67353</b>	<b>67142</b>	<b>66931</b>	<b>66720</b>	<b>66510</b>	<b>66301</b>	<b>66093</b>
97	Activities of households as employers of domestic personnel, washing and (dry-)cleaning of textile and fur products (96.01), hairdressing and Men's haircuts (96.02), Funeral and related activities (96.03), Other personal service activities n.e.c. (Shoe Blacks) (96.09)	202929	208326	213866	219553	225391	231385	237539	243855	250340	256998	263832	262748	261668	260592	259521	258455	257392	256335
<i>Sub-Total 96/97</i>	<i>Personal Services outside the Household, Personal Services</i>	<i>202929</i>	<i>208326</i>	<i>213866</i>	<i>219553</i>	<i>225391</i>	<i>231385</i>	<i>237539</i>	<i>243855</i>	<i>250340</i>	<i>256998</i>	<i>263832</i>	<i>262748</i>	<i>261668</i>	<i>260592</i>	<i>259521</i>	<i>258455</i>	<i>257392</i>	<i>256335</i>
<b>Section S + T</b>	<b>Other Personal Services (From Section S) Activities of Households as Employers; Undifferentiated goods and Services-Producing Activities of Households For Own Use</b>	<b>202929</b>	<b>208326</b>	<b>213866</b>	<b>219553</b>	<b>225391</b>	<b>231385</b>	<b>237539</b>	<b>243855</b>	<b>250340</b>	<b>256998</b>	<b>263832</b>	<b>262748</b>	<b>261668</b>	<b>260592</b>	<b>259521</b>	<b>258455</b>	<b>257392</b>	<b>256335</b>
<b>Total Value Added</b>	<b>GDP at Factor Prices</b>	<b>4725551</b>	<b>5119876</b>	<b>5436448</b>	<b>5876981</b>	<b>6017227</b>	<b>6208017</b>	<b>6237203</b>	<b>6009303</b>	<b>6490731</b>	<b>6411082</b>	<b>6554176</b>	<b>6749173</b>	<b>6949134</b>	<b>7129401</b>	<b>7520138</b>	<b>7008544</b>	<b>7522168</b>	<b>7416814</b>