

**Missed Opportunity or Inevitable Failure? The Search for
Industrialization in Southeast Europe 1870-1940**

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Abstract

Southeast Europe's countries are often denominated as the 'first developing nations'. Since the end of the 19th century the question of industrialization dominated public economic debates in Romania, Bulgaria, Greece, and later on Yugoslavia. However, despite all soaring rhetoric no sustained industrial spurts occurred before 1940. Still today the failure of industrialisation in Southeast Europe is fiercely debated in economic history. Some researchers argue that inherently backward 'Balkan peasant societies' were incapable to modernize. Others emphasize unfavourable external conditions which hindered industrialisation. The paper argues in favor of external reasons without neglecting the partial failure of native elites.

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1. Growth and industry in Southeast Europe 1870-1940

During the last third of the 19th century Southeast European politicians and intellectuals entered into an intense debate about strategies to modernize and industrialize their countries (Harre 2009, Nicolae-Văleanu 1982, Lampe 1986, p. 38, Berend and Ránki 1982, pp. 26).¹ This debates reached its peak in the interwar period when for the first time in the Balkan countries full scale industrialization strategies were drafted; to be more precisely, strategies that anticipated central issues of the discipline of development economics emerging after 1945 (Ránki and Tomaszewski 1986, Turnock 1986, pp. 47-76, Pasvolsky 1928, Zolotas 1926). Indeed, in so doing, the newly independent Balkan states early formulated highly ambitious political and economic goals to catch up quickly to developed Western Europe after the “Ottoman dark ages”, so that according to Lampe and Jackson (1982, p. 6), these countries made themselves the “first developing nations”. However the intensity of the contemporary modernization discourse stood in stark contrast to the actual tangible results. Even though fundamental questions on Southeast Europe’s economic development are still a highly controversial issue, there is broad consensus that before 1940 no industrialization process resulting in self-sustaining modern growth took place neither in Romania nor in Greece, Bulgaria or Yugoslavia.² Moreover, there were no signs of a general catching-up growth, the Balkan states failed to reduce the gap in GDP per head with Western Europe (see table 1). Recent authors like Lampe and Jackson speak of “growth without development” and label the development of industry in the Balkans before 1940 as a sequence of industrial “mini-spurts” in contrast to a Gerschenkron big spurt (Lampe and Jackson 1982, p. 157, pp. 237-244, p. 587, Lampe 1986, p. 68-71, p. 93, Petmezas 2011, pp. 32-37). Pamuk contributed to the debate with his influential concept of ‘dependent growth’ to describe a dynamic (agrarian) exports driven growth process for Southeast Europe and the Middle East in the course of the ‘first globalization’, a process which inhibited industrialization and structural change (Pamuk 2011, 1987, Pamuk and Williamson 2011). Notwithstanding this industrialization failure there is consensus that during the period under consideration in all parts of Southeast European economies and societies certain deep going modernization processes were underway to facilitate rapid industrialization after 1945 (Lampe and Jackson 1982, pp. 576-599, Ivanov and Tooze 1997, p. 672, p. 698). However, on the eve of the Second World War all Southeast European countries were still developing countries constituting an integral part of the European periphery (Table 1, Aldcroft 2006).

Here: Table 1

Pattern of growth in Southeast Europe

Whereas all authors agree that the gap in GDP per head between European “core” and “periphery” widened during the interwar period, the question whether this divergence already existed before the First World War still leads to controversial answers. Good and Ma (1999) have been the most convinced advocates of convergence during the age of the ‘first globalization’ before 1914 and Maddison, despite all his skepticism has followed them. According to Good and Ma Southeast Europe can be seen as a more successful late-comer than Southern Europe. Their results suggest that

¹ I am deeply indebted to Daniel W. Bromley and Richard H. Tilly for their valuable comments on earlier drafts of the paper. I would particularly like to thank as well Socrates Petmezas and Georgios Kosetelenos.

² As with Central Europe or East Europe defining Southeast Europe or the Balkans could quickly become a definitional nightmare. Following the majority of scholars despite all remaining inaccuracies in the present paper Southeast Europe comprises Romania, Bulgaria, former Yugoslavia and Greece. Albania is not included due to the fact that no considerable industrial development occurred during the period under consideration.

Southeast European growth rates of GDP per capita were roughly the same or even slightly higher than in the European core. Thus, the income gap between the Southeast and the West of the continent did not change significantly during the period 1870-1914. However, due to the very fragile basis of Good and Ma's estimates their technically sophisticated approach using proxy measures has been criticized and convincingly rejected for the Bulgarian case by Ivanov and Tooze (2007, pp. 674-677).

Because of a notoriously weak data base, reliable estimations of long-term national income trends have been and still are rare. Based on elaborated macroeconomic accounting data, recent reliable studies only exist for Greece 1830-1939 (Kostelenos 1995, 2006, Kostelenos et al. 2007) and for Bulgaria 1892-1939 (Ivanov 2006, Ivanov and Tooze 2007). These studies suggest that incomes per capita rose in Southeast Europe in the decades preceding the First World War, but at much lower rates than in the Western European core (Table 2a). This result is fully in line with Bairoch, Pamuk, Foreman-Peck, Lains and Williamson who proved that long term growth really took place in Southeast Europe but at a rate too slow to induce any convergence of income levels within Europe (Bairoch 1976, Pamuk 2011, Foreman-Peck and Lains 2000, Lains 2002, Williamson 2000). On the other hand, none of the recent works has found evidence to support the extremely pessimistic view of Palairret and Sundhaussen that the Balkan countries experienced an "immiserizing growth" after their independence (Palairret 1997, Sundhaussen 1989a).³ To summarize, even if there was no long-term decline of real incomes, there is strong indication that the divergence between the Western European "core" and the Southeast European "periphery" prevailing characteristic of the growth process not only during the crisis ridden interwar period but also during the pre-1914 trade expansion of the 'first globalization'.

Here: Table 2a and 2b

This view supports the line of reasoning given by Pamuk and Wiliamson characterizing the 'first globalization' as a mixed blessing for the development of the Southeast European periphery. As will be worked out in more detail below, it was precisely the successful integration into a booming world economy after 1830 promoted by agricultural exporters that undoubtedly led to real income growth but not to structural transformation or better to say industrialization which in turn was a *condicio sine qua non* for long-term convergence to the income level of the advanced economies. Additionally, the most reliable data in Table 2a from Ivanov and Tooze as well as Kostelenos backed up by Bairoch and Lains, confirm classical works on industrialization and development in the 19th century European periphery of Gerschenkron, Berend and Ránki as well as Pollard. According to these classical authors Southeast Europe as the most backward part of the continent responded too weakly to the development stimuli received from industrializing Western Europe (Gerschenkron 1962, pp. 5-72, pp. 198-234, Berend and Ránki 1982, p. 122, pp. 139-144, pp. 155-157, Pollard 1998). All in all, the Balkan states were lacking crucial economic, societal and political prerequisites for a successful catching-up. However, as will elaborated in more detail below, Palairret and Sundhaussen are going much too far to regard the economies of the newly independent Balkan states, namely Bulgaria and Serbia, as regressing and de-industrializing due to a process of subsistence oriented 'peasantization' hostile to any modernization (Palairret 1997, Sundhaussen 1989a, 1989b).

³ A recent study by Lyberatos (2011) has shown that Palairret using a much too fragile data base, strongly overestimated Bulgarian farm output for the late Ottoman period before 1878; a flaw that is mainly responsible for the productivity decline assumed by Palairret for the entire Bulgarian economy 1870-1914.

Industry

Before analyzing the reasons for the failed industrialization process in Southeast Europe until 1940, the development of industry 1870-1940 will be outlined in its main features for two reasons. It, for one thing, provides a good starting point to demonstrate the slow pace of industrialization, and for another, it shows the fundamental differences to industrial development during industrialization in the 'European core' by shedding light on the changes in the share of secondary production in national income. First, using contemporary Southeast European sources it is much easier to differentiate between primary and secondary production than to draw a dividing line between artisan and factory production over time in a consistent way.⁴ Despite all remaining severe uncertainties the long-term data on secondary production in total is much more consistent and better suited to the needs of comparative analysis.⁵ Second, focusing on the changes or, better to say, continuities in the structure of secondary production, which, besides factory manufacturing, included artisan production and mainly rural based domestic industry, reveals that despite all advances industry could not outcompete pre-industrial modes of production.

Here: Tables 3 and 4

Across Southeast Europe the agricultural production shares' in national income did only decline slightly, so that they were in any case far away from indicating any 'structural transformation'. Except Romania, agriculture and forestry formed by far the largest sector of all Southeast European economies still in 1938 (Table 3). However, even in Romania this sector was larger than secondary production (including mining). Real structural change was not taking part very rapidly compared to Western European countries during their phase of industrialization. Tertiary production remained the second largest sector in all Southeast European countries except Yugoslavia over the entire period. To a certain degree this reflects the extraordinary expansion of the public sector compared to the respective Western European industrialization process (Lampe and Jackson 1982, p. 233).⁶ Around 1914 state bureaucracies (without the army) vastly outnumbered the modern factory labour force in all Southeast European countries.⁷ Public service's expansion continued during the interwar period.⁸

⁴ For example, many of the establishments which were counted as factory plants were in fact handicraft establishments. Moreover, it often remained obscure if not meaningless how large firms had been defined to be counted as factory plants in industrial censuses. Thus, it is an extremely demanding task to differentiate between artisan and factory production in Southeast European countries before 1940; let alone the definition of large enterprise production or factory (production) which differed extremely not only between historical industrial statistics of Southeast European countries at the same time but as well over time within the same country (Jackson and Lampe 1983, pp. 387-391).

⁵ It should be kept in mind, that due to the very fragile data base, all empirical work on growth and structural change within Southeast European economies 1870-1940 means nothing else than a first approximation. However, it helps at least to get a notion of the main lines of development.

⁶ State budget expenditures grew much faster than the economy before 1914 (Romania 1898-1912: 6.2%; Bulgaria 1898-1911: 5.4% p.a., GDP p.a. 1892-1911: 1.3%; Serbia 1898-1911: 3.4% p.a.; Greece 1899-1910: 2.7% p.a., GDP p.a. 1890-1910: 1.7%; own calculation based on Lampe and Jackson 1982, p. 234, Ivanov and Tooze 2007, p. 685., Kostelenos 2006, Table 1.1).

⁷ Around 1910 the Romanian government paid 87,000 employees compared to a modern factory labor force of 45,000. For Bulgaria this relation amounted to 47,000 to 16,000. State employees in Serbia and Greece numbered 25,000 and over 50,000 (Lampe and Jackson 1982, p. 235). It is assumed that the increase of state employees (without army) c. 1870-1914 was much faster than of the modern factory labour force.

As regards the role of secondary production for the entire economy, two groups of countries can be distinguished on the eve of the Second World War. While the share of Greece and Bulgaria yielded only around 10%, the respective number of Romania and Yugoslavia turned out significantly higher with around 30%. One important but definitely not the only reason for these greatly varying shares between the groups stems from the significantly larger share of mining and extraction in mineral deposits rich Yugoslavia and oil-extracting Romania.⁹ To obtain an even more informative picture than output trends may convey, the more reliable data on the development of the occupational structure 1910-1930 is presented in table 4. Still around 1930 agriculture was the main occupational activity of more than 70% of the labour force across Southeast Europe except Greece (Table 4).¹⁰ Indeed, the results indicate that, over the entire period, modern industry could only absorb a minor share of the fast growing Southeast European population due to its smallness and not due to a lack of growth (Jackson and Lampe 1983, p. 387).¹¹ From this it follows that mainly agriculture absorbed the bulk of population growth in all four Southeast European countries under consideration.¹² Or, put otherwise, there was definitely no “pull” of industry towards the growing rural labour.

To approximately assess the role of modern factory output for secondary production, the most reliable numbers are available for Bulgaria 1892-1924 (Table 5a). According to them, still in 1924 rural home industry accounted for nearly half of secondary production which was a much greater contribution to Bulgarian GDP than the one of large and petty industry combined (Lampe 1986, p. 71, pp.94-95). But this seemed to be an outlier even in a purely Southeast European comparison. However, in Yugoslavia still in 1938 rural domestic industry produced 17.5% of total manufacturing's output (Table 5b).¹³ According to Lampe's numbers only in Romania modern factory production seemed to have clearly outstripped rural domestic industry and artisan production as early as on the eve of the First World War (Table 5a). Industrial censuses of the 1920s and 1930s as well as

⁸ For example during the 1920s the Bulgarian state bureaucracy almost doubled and amounted to 87,000 employees by 1930 (Lampe 1986, p. 65).

⁹ For 1933/39 the share of mining in industrial and mining output was 10.9% for Greece (Kostelenos 2007, p. 142) whereas the respective figures for Yugoslavia stayed at 14.9% in 1939 (Stajić 1959, p. 36). Romania was one of the world's largest producers of mineral oil before the Second World War (Pearson 1971). Mining and refining accounted for around 21% of its industrial and mining activities in 1938 (Jackson 1982, p. 82). Bulgaria's mining activities were negligible.

¹⁰ One reason for Greece's relatively low share of agricultural labour force lay in the all-important role of labor-intensive merchant shipping in the Greek economy (Zolotas 1926, pp. 54-59).

¹¹ Bulgaria, Romania and Serbia did not see significant emigrations before 1914 (Ivanov and Tooze 2007, p. 688; Tomasevich 1955, pp. 151-155). Even in Greece, the classic emigration country, the lion's share of the demographic increase 1830-1914 was absorbed into the agricultural sector (Kopsidis 2012, p. 12). Still during the interwar period, the bulk of the increase in labour force was absorbed in agriculture where the majority of new employment opportunities were created whereas industry took only a fraction (Hauer 1985, p. 89, Teichova 1985, pp. 237-238).

¹² Between 1929 and 1938, in Romania the number of employees in processing industry approximately grew by 10,000 per annum on average, while the number of new labour force per annum roughly ranged between 100,000 and 200,000 on average (Roberts 1951, p. 70). The numbers for Yugoslavia also give evidence that during the 1920s, the majority of new employment opportunities were created in agriculture, primarily by division of existing farms, but not in commerce and industry (Tomasevich 1955, p. 306). The same goes for Greece and supposedly for Bulgaria as well (Petmezas 2009, p. 370). On average in Southeast Europe “no more than one-third of the annual average increase in manpower could be taken by industry and mining in 1937” (Hauer 1985, p. 89).

¹³ In 1939 in Greece the share of rural domestic industries in total manufacturing output seemed to be considerable lower with only 5.4% (own calculation based on von Bismarck-Osten (1952, p. 270).

calculations of national income support that Romania was still the most industrialized country of Southeast Europe on the eve of the Second World War (Lethbridge 1985, p. 536).¹⁴

Here: Table 5a and 5b

Large scale private industry as well as mining and oil extraction represented the fastest growing sectors of the Southeast European economies before the First World War (Table 6a). Annual growth rates of large scale industry ca. 1900-1915 outstripped those of export-oriented agriculture, exceeding them, as indicated by Romanian and Bulgarian grain production, by four to six times. However, the initial basis of Southeast Europe's industrial sector proved too small and the duration of the industrial mini-spurts too short to achieve sustained industrialization or structural transformation. Excluding the value of grain for flour milling, the share of large scale industry's gross output in total gross output or social product remained below 10% in all Southeast European countries around 1914 (Lampe 1975, pp. 59-60, Lampe and Jackson 1982, p. 237, Petmezas 2011, p. 32). And so, only a few scattered industrial agglomerations could develop and grow to considerable importance, in particular around Athens and Bucharest but also to a certain degree in some Romanian oil extracting regions, the area of Salonica and Naoussa, in parts of the Bulgarian uplands as well as parts of Slovenia and the Vojvodina (Turnock 1977, pp. 340-346, Petmezas 2011, pp. 34-35, Lapavitsas 2006).

Fully in line with the regional factor endowments of cheap labour and scarce capital light industries producing labour rather than capital intensive consumer goods dominated Southeast European industrialization efforts during the decades leading up to the First World War. To a large extent industrialization manifested in the gradual development of a large scale textile industry c. 1880-1914. Southeast Europe benefitted from the global relocation of low-value added industries moving away from the core to the periphery. These industries depended on cheap labour and material inputs. Additionally, in these branches, technological change had slowed at the end of the 19th century (Petmezas 2011, p. 35-36, Palairet 1983, p. 243, Pamuk and Williamson 2011, p. 170). However, as will be shown in detail later on mainly from the demand but also from the supply side a large peasant domestic textile production strongly oriented to self-consumption severely limited the growth perspective of large scale textile industries in the Balkans. Balkan large scale textile industries did replace market-oriented domestic proto-industrial production but never could outcompete peasant home production. The latter continued to grow in Southeast Europe despite the rise of mechanized textile manufacturing (Palairet 1997, pp. 243-297, Palairet 1983, laneva 2011, pp. 207-208, pp. 219-220, Turnock 1977, pp. 332-340, Lampe and Jackson 1982, pp. 244-247).

Data for Romania prove that growth varied greatly between different branches of factory production (Jackson 1986, p. 81). As verifiable for Greece around 1914 despite strongest growth in modern branches like some engineering and chemical industries, food and textiles not only dominated small-scale secondary but factory production as well, a pattern which seemed to be valid for the entire region. Even if Romania was one of the world's largest oil producers on the eve of the First World War the "petroleum branch was far more dominating in extraction than in manufacturing" (Jackson 1986, p. 84). Moreover, despite being the largest sector of factory production, food processing

¹⁴ In Greece 54.6% (1920) and 43.2% (1930) of all persons employed in industry worked in establishments employing only five or less people. 27.2% (1920) and 39.0% (1930) worked in establishments employing 25 and more people (Freris 1986, pp. 39-40). Romania in 1930 saw 38.9% working in establishments employing only five or less people but 43.9 % in establishments employing 50 and more persons (Teichova 1985, 271).

showed on average only a sluggish growth.¹⁵ All in all it is widely assumed that “the Ottoman and southeastern European industries failed to converge towards the rate of productivity growth of European industry” (Petmezas 2011, p. 34). However, as many questions remain open, especially on productivity, there is urgent need for further research.

Here: Table 6a and 6b

As regards to industrialization or, better to say, development of modern industry and industry policy interwar Southeast Europe went through two clearly distinctive and meaningful periods: the 1920s and the 1930s with the Great Depression as a watershed. As stated in an important British survey on the economic situation of the Balkan states in 1936 the crisis had changed the attitude toward ‘autarky’ within the region “from the political desideratum which had it largely been in the previous period into a vital economic necessity” (Royal Institute of International Affairs 1936, p. 115). In the face of collapsing revenues from agricultural exports rapid industrialization was now seen as the only way to radically cut (industrial) imports. For one thing, in a short-term perspective this was essential to offset drastically increased balances of payments deficits after the sudden drying out of capital inflows in the wake of failing global financial markets and for another, only industrialization opened up long-term development perspectives. As described in detail below, during the 1930s state interventions into the economy achieved a new quality partly coming close to a state planned economic development (Ránki and Tomaszewski 1986, Georgieva 1998, Calic 1994, pp. 403-421).

Even though the business cycles of each Southeast European country showed some individual characteristics depending to a certain degree on its stabilization policies implemented after the First World War and the “Great Slump”, their economic growth followed a common pattern which was about the same for entire Europe except the USSR: After a phase of stabilization after the First World War until 1925, the region experienced a boom from 1925-1929 which was interrupted by the Great Depression and then followed by a recovery starting around 1932 (Teichova 1985, p. 231).¹⁶ Whereas according to recent research the synchronization of the business cycles both within the Southeast European countries’ and with leading European economies started before the First World War, this process improved substantially during the interwar period (Morys and Ivanov 2011).

¹⁵ In 1915 oil refining contributed 24.1% to Romania’s factory net output and showed the highest annual growth rate of all branches in factory production 1901/2-1915 with 13.5% compared to 7.4% for food (only 2.3% for flour milling), 8.7% for textiles and 7.9% for entire factory production. However, still in 1915 consumer industries (textiles, food, leather, paper and printing) provided 50.8% of factory net output with 34.1% for food industry alone (own calculations based on Jackson 1986, p. 82, p. 84). Metals and metal working accounted for 7.2%. However, tobacco processing which took place in large manufactures though in a completely manual way had been netted out by Jackson.

Figures on the entire secondary production for Greece in 1914 reveal that the share of consumer goods amounted to 72.1% (leather/tanning: 5.9%, textiles: 17.3%, foodstuffs: 22.4%, paper: 0.3%, tobacco: 26.2%) compared to 27.9% mainly for intermediate industry inputs (mechanical industry: 9.2%, chemicals: 6.7%, construction materials: 8.3%, wood: 2.1, and public utilities 1.5%) (own calculations based on Kostelenos 1995, pp. 272-277).

¹⁶ It should be noticed here that against standard economic wisdom a postwar inflationary boom accelerated the recovery of industry through falling real wages and capital costs in all four Southeast European countries ca. 1919-1924 (Teichova, p. 235, Christodoulaki 2001, p. 80).

Although Southeast Europe's economic modernization accelerated significantly towards self-sustained growth during the interwar period the decisive "threshold" had not been crossed.¹⁷ However, it should be kept in mind that there was not a single country in the world that had managed to accomplish its industrialization during this crisis-ridden period (Lampe and Jackson pp. 325-326). Despite all advances capital goods industry remained poorly developed, "largely limited ... to extraction or primary processing industries, while mechanical and electrical engineering was little developed" (Teichova 1985, p. 242). According to Teichova to a certain degree the only exception was Romania were according to contemporary calculations the share of inputs used in the producer goods industries approximated to values typical of more intensively industrialized countries.¹⁸ A result that was early pointed to by contemporary German experts like Gross (1937 pp. 172-195).

As Table 7a shows, food processing and textile production continued to take the lion's share of industrial output in all Southeast European countries over the entire interwar period. In Romania, however, these shares stayed below 50% but were nevertheless high. As regards light industry losses of food industry were mainly compensated by textile industry which significantly expanded all over Southeast Europe, a development that is proved especially by the more reliable occupational data in Table 7b. Indeed, during the interwar period the tremendous rise of large scale mechanized textile industries continued to be the principal feature of industrial development in the whole region (Teichova, 1985, p. 247). Looking at heavy industry Southeast Europe failed to exploit its rich deposits of mineral raw materials to build up a large own iron, steel and chemical industry, and thus remained restricted to extraction or providing simple intermediates for export. This was also true for natural resources and thus especially oil-rich Romania. All in all, it must be stated, that oil-based industrial development mainly meant primary processing of raw materials for export rather than highly profitable oil-refining and processing (Teichova 1985, p. 255-257, Turnock 1977, Gross 1937, pp. 172-195, Berend and Ránki 1982, p. 127). Across all Southeast European countries domestic production of higher technology only satisfied a small fraction of the own demand (Teichova 1985, p. 253).

Here: Table 7a and 7b

Over the years, the shares of industry in employment and the capital stock show low and only scarcely improving values. According to Teichova in the mid-1930s employment in industry, mining and handicraft together took a share (clearly) below 10 % in Bulgaria, Romania and Yugoslavia, thus yielding values even lower as indicated by Lampe and Jackson (Table 4, Teichova 1985, p. 269). Data on the development of the capital stock is only available for Yugoslavia 1910-1939. According to Vinski the share of manufacturing, mining and electricity in all fixed assets increased between 1910 and 1938 from a tiny 4% to a still low 8% as compared to agriculture with 20% and 18% (1961, p. 215). Investment ratios which have only been roughly estimated turned out exceptionally low between 5% and 8% all over Southeast Europe (Teichova 1985, pp. 280-281) and thus being far from inducing any 'big spurt'. With this said, capital accumulation in Southeast Europe awaits further

¹⁷ Important modernization processes indicating fundamental structural change like urbanization or industrializing of the occupational structure accelerated only slightly if at all. Still around 1930 the share of urban population amounted between 19% and 21 % for Romania, Bulgaria and Yugoslavia, and reaching almost 33% in Greece (Lampe and Jackson 1982, pp. 334-335).

¹⁸ Teichova refers to Predescu who calculated a share of 45.65% persons employed in industry producing capital goods for Romania around 1930. The contemporary German share was the same with 45.66% (Predescu 1940, p. 66). Another German study calculated two indices a first for Romanian consumer and a second for producer goods (1927 = 100). The output index of producer goods had reached 158.4 and that one of consumer goods 140.2 in 1937 (Roth 1955, p. 90).

research as most questions are yet to be answered. Lampe's characterization of Bulgaria's industrial development during the 1920s as "industrial growth without development" was valid for all of Southeast Europe and the entire interwar period (Lampe 1986, p. 68, see as well Calic 1998, 1994).¹⁹ Though, if anything, large factory enterprises advanced in Romania, in fact, they gained only slightly in comparison with small scale manufacturing, so that between 1910 and 1930 the number of workers in industry did not change (Jackson 1986, pp. 234-237). According to Lampe and Jackson over the entire interwar period Southeast Europe's industry did not see significant concentration processes indicating a new stage of development (Lampe and Jackson 1982, p. 419).

Despite this missing, industry in the region grew significantly faster than in Western Europe during the interwar period.²⁰ Rates of industrial growth decreased in the Balkan states after 1929 but remained still high by international standards (Lampe and Jackson 1982, p. 483). Even though Southeast Europe's industry performed comparatively well during the Great Depression and the fragile situation of the 1930s, it was too small a sector to have a deep impact on overall economic growth to balance out the dragging influence of stagnating agriculture (table 6b, Lampe and Jackson 1982, p. 342, Teichova 1985, p. 237). The question "to what degree was the above average Southeast European industrial growth the result of massive governmental support and of a conscious industrial policy" will be analyzed below. What has to be explained in this context as well is the better performance of Bulgaria and Greece compared to Romania and Yugoslavia (table 6b).

As regards labour productivity in industry calculations show much lower values in Southeast Europe than in the most developed European countries – to be more precise, perhaps only a quarter or a fifth of West European values. However, it must be pointed out that the available data has only allowed a very rough approximation (Teichova 1985, pp. 278-279). As the industrial output grew faster than industry's labour force c. 1929-1938 it is very probable that labour productivity in Southeast European industry did increase though, in general, at low annual rates around 1-2%. However an estimation conducted by the Bulgarian economic historian Berov supports the assumption that both industrial labour productivity and real wages stagnated between 1904 and 1949 (Teichova 1985, p. 277, Berov 1973). Additionally there existed a wide productivity gap between industrial and agricultural labour within the Balkan countries.²¹

¹⁹ As described paradigmatically by Christodoulaki for Greek manufacturing: „It continued to be dominated by small, self-financing enterprises which used labour-intensive techniques and produced low quality goods. Investment ratios were low and the share of capital goods industries in the total value added of the sector was limited. Textiles and food stuffs, both smaller-scale industries, based on obsolete technology and a highly protected market, were responsible for the lion's share of the total value added of the manufacturing sector. Industrial production was mainly focused on domestic consumption" (2001, p. 78).

²⁰ Piper compared the development of industrial production of Southeast Europe (Hungary, Romania, Yugoslavia, Bulgaria and Greece) with the rest of Europe. According to his index numbers (1928 = 100) Southeast Europe reached 137.3 in 1937 whereas the rest of Europe only achieved 112.6 (Piper 1961, p. 98).

²¹ According to Vinski in 1938 labour productivity in the large scale manufacturing sector (29.400 dinars) was more than five times higher than in the small scale sector (5.400 dinars) encompassing people employed in small crafts and agricultural holdings up to 20 ha (Vinski 1967, p. 268). The famous Romanian economist Mihail Manoilescu, an ardent advocate of forced industrialization and predecessor of Raul Prebisch's theory of dynamic comparative costs, calculated a four to five times higher labour productivity in Romanian industry compared to agriculture (Manoilescu 1935, p. 30). The higher industrial labour productivity was strongly correlated to significantly higher capital intensity. 1938 in Yugoslavia capital intensity in manufacturing, mining and electricity was seven times higher than in agriculture including rural domestic industries (Vinski 1967, p. 269).

Leading questions

After giving the outline of economic growth and industrial development in Southeast Europe the underlying causes for the slow pace of industrialization are analyzed; a question which has been fiercely debated, especially within the Southeast European countries themselves, ever since the issue of industrialization has entered into discussion during the last decades of the 19th century. Following the literature the subsequent topics and questions will be considered:

- (1) Did backward traditional-bound peasants failed to carry out a productivity enhancing agrarian revolution and thus prevented industrialization as has been argued by many scholars until today or could it not be the other way around, namely, that a lacking dynamic urban and industrial sector blocked agricultural and industrial development?
- (2) Or: Was industrialization deprived because the agricultural export boom of the first globalization exerted a “pull” of agriculture strong enough to attract market orientated peasants and domestic investors - both highly responsive to changing markets - and thus even deflecting labour and scarce capital from industry to agriculture?
- (3) Did the development of modern capital markets in Southeast Europe substantially contribute to industrialization?
- (4) Did a lack of consistent modernization policies retard industrialization? Moreover, were Southeastern European governments really able to carry out a targeted industrialization policy or was a foresighted industry policy doomed to failure under given disadvantageous internal conditions such as corruption, burdensome constraints of urgent short-term fiscal needs, pressure for rearmament and erratic interventions of foreign powers as well as external conditions like the Great Depression?

1. Agriculture and industrialization

Indeed, since agricultural productivity had been extremely low and stagnating since the end of the 19th century, Southeast European agriculture failed to stand comparison with Western and Central Europe (Moore 1945, p. 35, Ivanov and Tooze 2007, Petmezas 2009, p. 356, Roberts 1951, pp. 56-66). Starting in the 1830s, the agricultural export boom during the first globalization had induced a long-lasting phase of extensive agricultural growth bringing about tremendously expanding agricultural output though without increasing productivity. Farmland and (rural) population the most important inputs in Balkan agriculture increased at unprecedented rates until the First World War. Population growth which proved to be the highest ever measured in Europe started to slow down only as late as the end of the 1920s (Jackson 1985). Using the ill-defined term ‘agricultural overpopulation’ contemporary experts and historians have argued that an ever growing rural population had literally eaten up all economic growth. In this view ‘agricultural overpopulation’ - inevitably accompanied by low productivity - had massively curtailed the propensity to save. The preclusion of investment caused by an extraordinary population growth was seen as one of the main obstacles to development by preventing accelerated capital formation from reaching a level sufficient for sustainable industrial growth (Berend 1985, p. 186, Pollard 1998, p. 75). Moreover, Southeast Europe had become caught in a vicious cycle which impeded and discouraged any development: for one thing a too slowly growing industry was lacking the least necessary condition for absorbing the boosting rural population and for another, industrial growth was hindered by the backward state of a low-productive low-income agriculture which, besides its shortcomings in capital formation failed to

provide a promising domestic demand for industrial goods (Teichova 1985, pp. 237-238, Palairet 1997, p. 321).

This line of reasoning clearly follows the old view that – as a *condicio sine qua non* – a productivity-enhancing agricultural revolution has to precede an industrial revolution. Related to 19th century Southeast Europe, it has been and still is argued that extremely backward but powerful ‘pre-modern’ (peasant) societies blocked any ‘capitalistic agrarian reforms’, thus preventing these societies from creating larger, market-oriented and more profitable farm units. No small numbers of scholars and contemporary experts interpret this fault as, figuratively speaking, the “original sin” which blocked the road to industrialization for good and all. Finally, Southeast Europe could not follow the successful ‘Prussian way’ to industrialization, which allegedly is perfectly adjusted to ‘backward pre-capitalist societies’ by forcibly proletarianizing the mass of low-productive peasants through a strictly ‘growth-without-equity’ oriented ‘reform-from-above’-policy (Palairet 1997, p. 2, p. 205, pp. 310-323, Lampe and Jackson 1982, pp. 183-184, p. 195, Sundhausen 1989a, 1989b, Calic 1994, pp. 47-52, 1998, pp. 333-335, Tomasevich 1955, pp. 398-399, Bairoch 1985, Boserup 1972).

Recent research has completely challenged the concept of a “first agricultural revolution” as an all-important pre-requisite for a breakthrough to industrialization for the European core and even for a latecomer like Prussia. Moreover, a mass of empirical studies has clearly established the new dogma according to which in the pre-period and during the age of industrialization an agricultural revolution as a merely demand-induced process was caused by urbanization and not vice versa. In other words: a country without a vibrant and large domestic urban as well as industrial sector is not expected to experience any acceleration of agricultural productivity.²² In fact, as first proved by Thünen during the long 19th century, highly intensive high value-added farming was definitely not profitable in the European periphery but only in the direct vicinity of urban-industrial agglomerations (Kopsidis and Wolf 2012).²³ Thus, the dominance of low-income extensive agricultural growth in Southeast Europe has not to be interpreted as a development failure stemming from a stubborn peasantry which missed the golden opportunity to progress because of its own deep, culturally-rooted inflexibility as suggested by Palairet and Sundhausen (Palairet 1997 pp. 1-2, pp. 298-341, p. 360, Sundhausen 1989a, 1989b). Rather, the Southeast European low-yield low-profitable agriculture seemed to result from the adjustment to the conditions of adverse markets and factor endowments as faced by the

²² The new paradigm of European growth and agriculture c. 1350-1850 has been briefly summarized by Bruce Campbell: „Economic and urban dynamism begot agricultural dynamism, and not *vice versa* (as was once believed). When it came to economic growth, agriculture was the cart not the horse” (2010). Having in mind that many scholars working on Southeast Europe still interpret the West European agricultural development as the blue-print for the Balkans in the long 19th century this re-interpretation should have had consequences for analysing the interactions between agricultural development and economic growth in the Balkans.

²³ As regards differences in net income per unit land and thus the propensity to saving between extensive farming and grain exporting areas of the European periphery and high intensive livestock farming in the European core, a first hint may be given by Ernst Engel’s analysis of Prussian land rent data. Prussia contained very different areas, among others, for one thing grain-producing areas in the East, which according to Pollard were part of the backward European periphery (1998, pp. 62-63), and for another leading European (agricultural) regions in its heavily industrialized West. According to Engel around 1860 considering the same soil quality and using the same farm technology, the fact that land rents were two to three times higher in the intensive farming West than in the grain exporting East Elbia was only due to the latter’s inferior access to high-income urban-industrial food markets located in the West (Engel 1866, p. 173). The situation was even worse in Southeast Europe having in mind that Prussia’s Eastern territories belonged to the more developed parts of the European periphery.

Balkan peasants (Kopsidis 2012). What did this mean for the perspectives' of industrialization in Southeast Europe?

First of all, the low productivity of farming was not the cause but the consequence of an extremely low-developed urban-industrial sector at the beginning of the 19th century. Thus, there was simply an almost complete lack of necessary preconditions for a demand-induced, productivity-enhancing agricultural revolution. Indeed, as worked out paradigmatically by Berend and Ránki besides other development deficits in all parts and sectors of economy and society it was the exceptionally low standard of living and low saving rate which, from the beginning severely hampered capital formation and industrialization (but as well agrarian progress) in Southeast Europe. Additionally the severe institutional deficits regarding the *innere Staatlichkeit* (nation building), commerce and industry as well as education made Southeast Europe the poorest developed region of Europe even compared to the Tsarist Empire. According to the literature it was the European region that was least qualified to industrialize; a statement with far-reaching consequences as was convincingly argued by Berend and Ránki, and other scholars: to fully exploit Gerschenkron advantages of backwardness for industrialization a certain degree of development (and GDP per head) has to be reached already at the outset (1982, pp. 71-72, pp. 155-160, Pollard 1981, pp. 245-246, 1998, Lains 2002, Teichova 1985, p. 253). Given the historical heritage of extremely sparsely populated embattled imperial border lands and more than a century of anarchy within the Ottoman Empire before 1830 this threshold was not or better to say could not have been crossed by any Southeast European country by the middle of the 19th century.

That Southeast Europe reacted to the primary production supporting terms of trade-shock of the first globalization mainly with an agricultural export boom was encouraged by the low stage of development of Southeast Europe's societies and economies.²⁴ To reclaim land on a large scale over a long period as a way of labour based 'non-monetary capital formation' was a task which was perfectly adjusted to the factor endowments and factor qualities of Balkan rural societies (Kopsidis 2012).²⁵ What was needed was a demographic reaction to the increasing farm labour demand – which took place vigorously – and at least the establishment of rural trade and credit markets able to meet the comparatively low capital demand of small peasant producers. Balkan rural societies and merchants were fully capable in building up sophisticated so called interlocked rural factor and product markets.²⁶ However, it was a different task to provide all the necessary funds to meet the long lists of prerequisites, namely infrastructure, markets, institutions, and a level of human capital sufficient for a 'big spurt' to develop a competitive industry. Undoubtedly this was a task too

²⁴ This means that integration into the capitalistic world economy fostered the expansion of the traditional agricultural sector and thus aggravated structural transformation towards an industrial society. In other words, despite all its modernization effects, the underdevelopment of Southeast Europe was in fact cemented by the first globalization as assumed by an influential strand of historiography rooted in very different economic theories from a liberal, non-dogmatic Marxism to certain strands of neoclassical economics (Berend and Ránki 1982, pp. 107-141, esp. p.124, Williamson 2006, 2011, Pamuk 1987, Pamuk and Williamson 2011).

²⁵ Balkan rural societies reacted to the terms of trade-shock of the first globalization in the same way although they had different prevailing *Agrarverfassungen* (rural institutions). Allegedly subsistence oriented Bulgarian or Greek free small peasant farmers as well as reputedly 'semi-feudalist' but nonetheless 'more capitalist' Romanian land-magnates had swiftly enhanced production for export since 1830s.

²⁶ Southeast European rural societies seemed to be comparatively successful in commercializing their agriculture and intensifying their market relations compared to other parts of the global periphery (Lampe and Jackson 1982, p. 580). However, a lot of research on rural commercialization in 19th century Southeast Europe has still to be done, not to speak of comparative studies only within the periphery.

demanding to be satisfied by Southeast European economies and societies in the middle of the 19th century.

Even though until around 1860 large parts of the Ottoman Empire had seen de-industrialization caused by the trends of relative prices and enforced opening of markets for Western industrial goods, there had equally well certain parts, especially in Southeast Europe, experiencing a real boom of textile proto-industry c. 1830/40 -1870/80 (Palairret 1997, pp. 63-84, Pamuk and Williamson 2011, pp. 166-167). In principle this boom might have had the potential to pave the way for industrialization in the important textile sector as did happen in other European proto-industrial regions. This was especially true for Bulgaria which became the most developed manufacturing area and richest province of the Ottoman Empire during the second third of the 19th century. Supply side factors like a strictly restricted access to fertile lands in the plains imposed by Ottoman authorities, kept up the concentration of industrial population in the Bulgarian uplands. On the demand side Bulgarian producers maintained large market shares by producing mainly coarse woolen but as well cotton textiles which perfectly appealed to the conservative taste of Ottoman (urban) consumers. And so, only the relatively small segment of fashion trade could be fully overtaken by Western imports. Large-scale imports of British machine-made cotton-yarn made Bulgarian hand-weaving, depending on cheap labour, competitive. But then, in the 1860s, Bulgarian proto-industries' growth started to slow down significantly if not declined. What followed was by no means an increase of Western imports but the rise of a mechanized domestic textile production. Proto-industry largely disappeared after 1878 but the growth of large scale textile industry was restrained as well. Even if the rise of factory-based textile production played an important role in Balkan industrialization already before 1914 its growth was severely hampered by obstacles on both supply and demand side; obstacles, which had been unknown to the earlier industrialization in the Western European core or contemporary Scandinavia. In this context a paradigmatic case study on Bulgaria was conducted by Palairret (1997, pp. 63-84, pp. 173-202, pp. 243-297).

One important reason for the decline of Bulgarian proto-industry and the rise of a more labor-saving mechanized textile industry lay in the constantly increasing demand for labour in agriculture when the plains had been opened to settlement mainly by free small peasants.²⁷ In Bulgaria the seizing of land was strongly pushed up after its liberation in 1878. Now, Muslim land could be occupied by Bulgarian peasants on a large scale. As a consequence the Bulgarian grain economy reached a stage of unprecedented expansion after 1880. Grain exports accounted for around 70% of Bulgarian export revenues c. 1880-1910 and developed into by far the largest sector of the Bulgarian economy (Lampe 1986, pp. 24-26, Ivanov and Tooze 2007, pp. 699-700). Industrial labour markets came under severe stress because, driven by the expansion of (peasant) agriculture industrial wages really exploded – partially doubled - within a few years. Additionally, there is evidence of a large-scale domestic capital drain on the secondary production to be invested in more profitable agriculture and grain trade instead (Palairret 1997, p. 83, pp. 177-179, pp. 192-196, Lampe and Jackson 1982, p. 143-145).²⁸

Women, the backbone of textile proto-industrial labour force, turned towards agriculture. Male laborers starting to work in the factories knew that they anytime could return to farming. According to Palairret after 1878, it was the intense cost pressure caused by labor shortage and price inflation

²⁷ Except Greece after 1860 grain farming became the backbone of all Southeast European economies and notably dominated exports in Bulgaria and Romania but also, though to a lower degree in Serbia.

²⁸ A shifting of capital to agriculture and maritime trade also contributed to the decline of textile-proto-industry in Ottoman Thessaly around mid-19th century (Petmezas 1990).

that posed the major problem for Bulgarian textile producers rather than import competition from West or Central European industrialists on the specific Bulgarian export mass market in the Ottoman Empire. As the highly mobile proto-industrial labour force was melting away after liberation Bulgarian supply of textiles declined and other Balkan producers filled the gap. Bulgarian woolen industry could only survive by mechanizing during the 1880s and 1890s. In so doing, it could maintain its domestic market and important Ottoman market.²⁹ However, Bulgarian wool producers lost large parts of their Balkan markets and even their domestic market shrank. All in all, Bulgarian output diminished when Bulgarian woolen production was being mechanized. In general, the share of textile industries in the Bulgarian social product fell significantly c. 1880-1910,³⁰ so that industrialization was far from successful in this time. Indeed, it looks as if mechanized textile production could not compete in the Bulgarian labour market against low productive peasant agriculture still relying on wooden ploughs.³¹

According to Palairt, domestic demand side factors contributed strongly to this abortive development. The expansion of the grain economy as well as the mass eviction of the more urban-based Muslim-population was accompanied by a process of de-urbanization and ruralization of the entire Bulgarian economy which significantly reduced the important market of low-income urban consumers. Additionally, partly as a reaction to labor-cost driven price rises in textiles, Bulgarian peasants adhered to home produced textiles which in turn was facilitated by the use of machine yarn. To sum up, as more or less everywhere in the Balkans around 1903 the subsistence sector still accounted for 73% of Bulgarian textile consumption strongly restricting domestic demand for factory produced consumer goods (Palairt 1997, p. 279). In this context it should be remembered that not only for Bulgaria but also for Serbia and Romania, there is a lot of evidence that rural domestic manufacturing flourished and continued to grow until the eve of the First World War (Madgeauru 1911, Calic 1994, pp. 97-119). In fact, as peasant domestic manufacturing, which partly produced for the market, outcompeted industrial production, growth perspectives for a conceivable light industry driven industrialization became severely constrained all over Southeast Europe. Although there is much need for further research to understand the economics of Southeast European peasant households in the long 19th century, it could be assumed that peasant self-sufficiency in textiles strengthened as farm incomes stagnated due to, on average, falling grain prices after 1870/1880, a development that, in turn, resulted from rising imports from overseas to traditional Southeast European export markets. The same reaction could be observed after the severe slump of agricultural prices during the Great Depression (Tomasevich 1955, p. 337, Kopsidis 2012, p. 19).

To illustrate the adverse economic consequences of these developments, a simple Lewis model of a dual economy, containing a large 'traditional' sector (peasant agriculture) and a small 'modern' sector (manufacturing and plantations), is indeed helpful (Pamuk and Williamson, 2011). In this paper a slight variation of that approach will be presented (Lewis 1954). In light of Lewis, Southeast

²⁹ After the end of the Russian-Turkish war in 1878 Bulgaria did not become fully independent but autonomous within the Ottoman Empire, and thus had more or less free access to the large Ottoman market until its full independence in 1908.

³⁰ The Bulgarian commercial woolen output dwindled from 2,030-2,185 to 1,216-1,264 thousand metric tons between 1867 and 1903 (Palairt 1997, p. 296).

³¹ The same problem faced the successful Macedonian textile industry in the first decade of the 20th century as labour-demanding and highly profitable tobacco growing and (completely manual) processing started to expand. Industrial labour became scarce and wages in textile industry increased to an extent that is best described in the following contemporary comment: "Where tobacco is processed, there cannot exist a single other factory enterprise" (Palairt 1997, p. 353).

Europe faced one fundamental obstacle to increased capital formation for successful industrialization: the export sector was identical in all pertinent economic traits as the 'traditional' (low productivity) agricultural sector. Recall that the Lewis model posits a highly productive and modern export-oriented 'capitalist' plantation-agriculture alongside of a very small modern industrial sector. Wages in industry and on plantations are lower than the marginal productivity of labour because the lower marginal productivity of the 'overpopulated' large traditional subsistence sectors determines the wages in the modern sectors. The lower the wages in the traditional peasant sector the more capital can be accumulated in the modern sectors and the faster industrialization proceeds. It should be noted that Arthur Lewis thought of a densely populated, land-scarce agrarian Asian economy. However, the countries of Southeast Europe in the 1860s were land abundant and sparsely populated — a condition that contradicts the story of 'agrarian overpopulation'. Under such conditions, an expansion of the agrarian-based export sector would raise wages in the industrial sector as well and thus lowering capital formation in industry. For example during the critical phase of early industrialization c. 1840-1870, Germany's dual economy enabled real wages in industry to stay constant despite tremendous productivity increases and thus facilitating the German 'take-off' (Tilly 1990, pp. 67-77). In contrast, Balkan industries in their formation phase were often confronted with steep increases in real wages.

These wage increases were likely induced by the terms-of-trade shock of the first globalization, and also by the specific process of decision making in peasant households in a situation of abundant land and scarce labor. Throughout Southeast Europe, the expansion of agricultural land and agricultural labour — and an associated increase in agricultural output and agricultural exports — continued right up to the beginning of the First World War. But it must be noted that the terms-of-trade shock allegedly favorable to Southeast Europe's agricultural exports had disappeared in the 1860s. Something else was necessarily at work. Palairot was the first to work out the perverse relationship between easy access to land and the resulting labor-intensive industrialization which represented the only possible economic trajectory for the economies of Southeast Europe. Palairot suggests that this arose because of the inflexibility of some alleged "anti-capitalist economic ethic" combined with a unique Balkan cultural inertia under the grip of peasant mentality (whatever that might be). Industrialization was blocked. On the contrary, I argue that it was the exceptional mobility and reasoned adjustment to changing labour and land markets by the Southeast European labor force that offers an explanation for the delays in industrialization.

Even during the 'golden age of Bulgarian proto-industry' (c. 1830-1860), the local and regional availability of food for low-income textile workers faced severe and lasting friction. In light of this, it is reasonable to understand why Bulgarian households would prefer to expand their grain production for own consumption even under the conditions of falling world market prices for grain after 1870. With highly volatile and badly functioning rural commodity markets persisting into the early 20th century, it would seem that small producers had logic on their side. Expanding self-production of staple crops is the reasonable response to unstable and unreliable market conditions. Most important, under the conditions of highly volatile food prices, the opportunity cost to rural households of reducing their labour input in agriculture loomed much larger than the prevailing market prices for agricultural commodities (Ellis 1996, pp. 139-143). It is therefore questionable to use such market prices in terms-of-trade-calculations for Southeast Europe as done by Pamuk and Williamson. Notice that the new availability of agricultural land provided the first real chance for poor households to allocate labour between own production and industrial work. Their allocative decisions suddenly affected the supply of labour for industry, and thus the ability of industry to grow.

Importantly, the so-called “Lewis-problem”—excessively high real wages in modern industry—would continue to exist regardless of trends in the terms-of-trade for industrial goods.

More research is necessary to determine whether rising real wages in Southeast Europe after 1880 can be explained without referring to “Lewis-like-thinking” as maintained by Pamuk and Williamson who assume productivity increases as the driving force (2011, p. 176). The Bulgarian data speak against any substantial productivity increases after 1890 either in agriculture or in industry. However, Bulgarian if not Southeast Europe’s industry as a whole was unable to outperform other sectors, quite apart from their problems in the labour market. The next chapter will show that in the all-important capital market, Southeast Europe’s industry faced severe obstacles and was unable to compete against other demanders for scarce capital.

2. Capital markets and industrialization

Given higher productivity in industry, an inter-sector transfer of labour from agriculture should have substantially increased overall economic productivity.³² However, this needed capital. According to most authors capital scarcity remained one important if not the principal reason that industrialization only proceeded sluggishly over the entire period (Lampe and Jackson 1982, p. 330, Lethbridge 1985, p. 593, p. 574, Zolotas 1926, p. 23). Capital imports could have helped to alleviate scarcity of (industrial) capital and to reduce the costs of capital (Radice 1985, p. 37). The question then is why the chronic lack of domestic (industrial) capital was not rectified by (sufficient) capital imports.

At the beginning of their integration into global markets all Balkan economies were plagued by an exceptional high level of interest rates compared to more developed European countries; a situation with far-reaching consequences since high costs of capital have a stronger profitability-reducing impact on capital intensive industry than on labour intensive agriculture.³³ A conceivable remedy for combating capital scarcity may have been the emergence of modern banking. The rapid development of modern banking within the region (starting first in Greece around 1840) and early integration into international capital markets theoretically could have had the potential to intensify direct foreign investment. However, Southeast European experience suggests that the implementation of sophisticated modern banking in an otherwise underdeveloped economy, state and society is a mixed blessing (Lampe and Jackson 1982, pp. 202-203, Stassinopoulos 2011). In the following it will be discussed why capital markets did not or could not play the positive role for industrialization in Southeast Europe as, theoretically could have been expected.

³² However, that a large fraction of Southeast Europe’s agricultural laborers according to Western European definitions were indeed only part-time farmers who pursued different professions over the year makes it doubtful whether labour productivity in industrial manufacturing was indeed three to four times higher than in agriculture as indicated by the literature. Additionally the inability of the small industrial sector to absorb rural population growth is reflected in low agricultural productivity because rural labour force had no choice other than to stay in agriculture. This was especially true for the interwar period when emigration became nearly impossible.

³³ Instead of concentrating on industrialization recent research emphasizes the variety of organizational forms of manufacturing besides factory production which developed during the long 19th century in Southeast Europe with the closer integration into the world market (Ianeva 2011, Quataert 2011). In fact, the new forms of urban handicraft and rural home industry were much less capital intensive than factory manufacturing and like agriculture they did not attract foreign investment. Their flourishing therefore can be interpreted as an adjustment to capital scarcity.

Selective modernization characterizes best the course of economic development in Southeast Europe c. 1860-1914 (Petmezas 2011, p. 37). On the eve of the First World War long-distance transport and communications as well as banking and public finance constituted the modern sector of Southeast Europe's dual economies. The driving forces behind the forming of this peculiar modern sector were geopolitical competition and globalization. For all newly independent Balkan states three main tasks had made extensive borrowing necessary: (1) their aggressive irredentist agenda in an environment of fierce geopolitical competition of Great Powers placed high demands on the state's finances for military purposes, (2) heavy investments in infrastructure for the intended economic and social modernization, and (3) public administrations which grew faster than the population.³⁴

From the beginning, the main task of the emerging modern banking systems in Southeast Europe was to finance steadily rising public debts and budget deficits. A modern style but, in relation to the size of each Balkan economy oversized banking system which was fixated on the demands of the public sector contributed to augmenting the indebtedness of all Southeast European states except Romania to a point that sovereign default became unavoidable at the end of the 19th century.³⁵ All in all under these conditions private investments in industry remained limited for four reasons which to a large degree continued to be effective during the interwar period:

- (1) A large-scale crowding out of private investment in industry by government stocks on domestic and international capital markets.
- (2) A tight monetary policy only oriented towards the interests of the creditors leading to overvalued currencies and high real interest rates.
- (3) Public investment took only a relatively low share in all government expenditures.
- (4) The heavy investments in infrastructure neither had gained profits nor had been connected with any positive external effects conducive to growth until the interwar period.

Only the access to European capital markets enabled the exceptional budget increases c. 1860-1914 which in the end outstripped economic growth all over Southeast Europe. Central banks, which in all four Balkan countries had been established successfully before 1885, concentrated on financing budget deficits under the restrictive conditions of the gold standard system. This bore severe consequences for industrial financing which domestic and foreign investors in any case had already considered to be an extremely risky business demanding much more long-term commitments than agriculture and trade.

Central banks did not see their main task in providing the increasing money demands of a growing economy. They exclusively concentrated on the interests of (foreign) trade creditors and foreign owners of their public debts. As a result Southeast European currencies were chronically overvalued. A tight monetary policy and overvalued currencies hampered industrial financing and the competitiveness of domestic industry severely. This policy also implied that Central Banks withdraw

³⁴ The modern transportation as well as communication infrastructure, however, was limited to the requirements of overseas trade in bulk non-processed commodities from a small number of central harbors and a few strategic railways built mainly as public works (Harlaftis 2011, Papakonstantinou 2011). The domestic infrastructure for terrestrial trade within the Balkan countries further remained only poorly developed which prevented the emergence of integrated domestic markets. However, sometimes high transport costs protected as well manufacturing in inland areas until the end of the 19th century (Papakonstantinou 2011, Berov 1975).

³⁵ In Greece the ratio of total bank assets to GDP increased from 73 percent in 1889 to 124 percent in 1913. Yet this was a significantly larger share than in the most developed European countries not to speak of the other Southeast European countries (Stassinopoulos 2011, p. 328).

from long-term-lending to private investors, once thought to have been one of their tasks (Lampe and Jackson 1982, pp. 225-236, pp.253-269, Stassinopoulos 2011, pp. 318-324, Zolotas 1926, p. 104). That Balkan bank systems complied with Western European standards only at the top but remained much less-developed at the bottom in saving, investment and mortgage banking made this withdrawal particularly harmful for industrial financing. Before the First World War, even after the Balkan states had managed to put their state finances in order and their central banks had achieved parity between the national currencies and the French gold franc, European investors continued to refrain from investments in private industry and preferred state bonds as safe investments instead because these were backed by the earnings of state monopolies and indirect tax revenues which were controlled by the international money lenders. Compared to this 'easy money' industrial investments still remained a much riskier business in the first decade of the 20th century. The state did not fill the gap, either to make investments or to cover these risks. In 1911, investment expenses' share (infrastructure, education and direct investment in industry and agriculture) in the state expenses did hardly reach 40% in Bulgaria and less than 30 % in the other three states (Lampe and Jackson 1982, pp. 202-236, Lampe 1986, pp. 31-35, Stassinopoulos 2011, Lamer 1938, Feis 1930, pp. 258-292, Berend and Ránki 1982, p. 122).

The lion's share of public investment expenditure went to infrastructure, this mainly to finance railway construction. In most cases the Great Powers' military and geopolitical priorities were decisive for the routes chosen, not the demands of regional development. Whereas in the European core the backward and forward linkages of railways significantly contributed to industrialization and high positive external effects could be realized right from the beginning practically no linkages to local industry or positive external effects occurred in Southeast Europe before the First World War. Indeed, railroads failed to attract commercial traffic to a sufficient extent. No really profitable line operated in Southeast Europe before the First World War. Only in the interwar period did railway traffic become profitable and begin to replace the traditional pack animal caravan trade which carried out a large share of haulage of bulky goods, for example wheat, as late as around 1900. Social savings of investments in modern transport and communication only started to be materialized during the interwar period. To sum up, there is abundant evidence that until the First World War Southeast Europe's economies were too poorly developed to benefit much from railways. Railways did not contribute to economic growth but rather to heavily increase governments' exorbitant indebtedness and thus exacerbating to the crowding out of private industrial investments (Lampe und Jackson 1992, 208-212, Berend and Ránki 1982, pp. 91-101 Petmezas 2011, p. 38, Papakonstantinou 2011, Feis 1930, pp. 293-312).

Except mining and especially in Romanian oil production industrial financing before the First World War could only rely on domestic sources mainly by self-financing (Lampe and Jackson 1982, p. 589, Zolotas 1926, pp. 101-103). Notwithstanding, one enduring merit can be attributed to the developing of modern banking in Southeast Europe. Although the level of interest rates compared to Western Europe was still high around 1914 it had declined significantly all over Southeast Europe since the middle of the 19th century (Lampe and Jackson 1982, p. 225).³⁶

³⁶ In Greece the general level of interest rates for private credits decreased from 30-50% during the 1840s to 12-30% around 1900 and 12 % in 1911 (Zolotas 1926, p. 89).

The credit costs in industrial financing stayed extraordinarily high also during the interwar period.³⁷ Capital markets and especially foreign direct investments as well as domestic industrial financing developed erratically during the crisis ridden interwar period. After the stabilization of the postwar emergency credit expansion took place, 1924-28. However, the return to the gold standard imposed heavy burdens of monetary stabilization for all Southeast European countries. Initially the stabilization policy adversely affected not only exports through overvalued currencies but also industrial financing and investments via high capital costs.³⁸ The transfer of foreign direct investment and industrial loans to Southeast Europe, though it followed the positive trend, did not match the growth of capital trade in general.³⁹ Strict stabilization policy had just started to produce profound positive effects when the Great Depression coupled with an unprecedented slump of agrarian prices in the course of the World Agrarian Crisis led to a collapse of the external credit relations of Southeast Europe's primary goods-exporting countries. After the reversal of capital flows in the course of the breakdown of global financial markets in 1931, the existing significant import surpluses had to be reduced swiftly - which implied cutting the import of industrial capital and consumer goods near to zero. Subsequent to the crisis of 1929-1933 recovery took place.⁴⁰ However, the flow of credits to Southeast Europe had dried up and could not be revived (Nötel 1986, pp. 170-268, Lampe and Jackson 1982, pp. 376-402).

Interwar Southeast Europe could only pay foreign loans and imported capital goods to advance industrialization with agricultural exports. However, compared to the prewar period the trade prospects on international agricultural markets had deteriorated significantly. Agricultural exports stagnated and prices started to fall continuously since 1923 with the exception of 1927. Worsened export prospects reduced the borrowing potential of Southeast European countries to a degree that it was not possible to realize the amount of necessary (investment) funds to achieve a level of industrialization sufficient for sustained economic growth (Radice 1985, p. 39, Drabek 1985, pp. 395-432).

During the interwar period the net inflow of foreign capital from direct investment remained modest for all Southeast European countries except in resource-rich Romania. Moreover, foreign direct investment continued to flow into mining rather than manufacturing (Lampe and Jackson 1982, p. 424). Although direct foreign investment was too low to induce a significant increase of industry's share in national product, it contributed substantially to modernizing Southeast Europe's industry by helping to establish new product lines, transfer innovative technology, and improve management

³⁷ In Southeast Europe interest rates for corporate loans moved around 20% still in the 1920s (Teichova 1985, p. 288).

³⁸ The policy of increasing first of all the credit-worthiness of the war-ravaged Balkan countries at any costs enforced by international money lenders ignored the basic problem of Southeast Europe, namely that the necessary rapid expansion of its foreign trade could not take place due to strongly shrinking world agricultural markets in disarray and increasing agrarian protectionism on traditional Central- and Western European export markets (Drabek 1985 pp. 400-402).

³⁹ Until the Great Depression capital imports to Southeast Europe had developed positively but the by far largest part was used to resettle refugees, for infrastructure investments, rearmament, and to roll over old debts (Teichova 1985, p. 291).

⁴⁰ Greece recovered from the Great Depression faster than all other Southeast European countries due to its early departure from the policy of stable exchange rates. This measure affected positively the level of economic activity and reduced the trade deficit (Mazower 1991, pp. 143-270, Christodoulaki 2001, p. 82). Other Southeast European countries wasted valuable time adhering too long to a policy of stable exchange rates.

techniques.⁴¹ After the financial crisis of 1931 the volume of foreign investment dwindled to low levels.⁴² Moreover, in contrast to the broad international orientation of the 1920s banking and industrial financing as well as cooperation became increasingly dependent on political and military alliances. Nevertheless even if foreign investors lost power and the state's influence in industry increased direct foreign investment remained deeply implanted in the industrial sector of all Southeast European economies. Within the industrial sector, foreign investment participation was generally deeper in heavy industries: "in the basic oil, coal, electricity, steel, other metallurgical, and investment goods producing industries" which were seen as strategic industrial branches for industrialization in the eyes of contemporary experts and politicians (Nötel 1986, p. 282). Even if due to strengthened public regulations and controls conditions for direct foreign investments deteriorated during the 1930s, foreign investors in general continued with business as usual. Due to the fact that they could not export their profits anymore they participated in the process of industrial self-finance (Nötel 1986, 268-287, Teichova 1985, pp. 291-296).

However, Jackson and Lampe argue not to overestimate the weight of foreign influences on industrialization in Southeast Europe – as has often been done by liberal as well as Marxist historians (Jackson and Lampe 1983, pp. 385-386). Since the 1880s governmental modernization programs and industrialization strategies had played an important role for Southeast Europe's industrialization – the most in Romania, the least in Greece. State intervention was all the more important because of the continued shortage of domestic capital supply caused by chronically low levels of savings and inefficiencies of the bank and credit system; a situation that was valid after the First World War and even deteriorating during the Great Depression. Governments tried to encourage domestic capital formation in industry by various means which intensified during the 1930s (Teichova 1985, pp. 282-290). To what extent governments were successful will be discussed in the next chapter. However the political economy and the effectiveness of Southeast European states' comprehensive industrial policies have to be explored much deeper.

3. State and Industry

There is a broad consensus that the absence of a state apparatus which could have provided essential public goods like security for business was a central facet of the obviously missing 'social capability' for catching-up growth in Southeast Europe in the middle of the 19th century (Pollard 1998, p. 83, Berend and Ránki 1982, p. 69). Despite these even to contemporary Southeast European elites evident shortcomings ambitious modernization programs were put on the public agenda of the newly independent Balkan states, programs which would have even overcharged much more developed societies and administrations. During the entire period there was a large and partly surrealistic gap between economic reality and the soaring plans for modernization discussed in inner circles, cabinets, ministries, parliaments as well as by the public. The newly independent Southeast

⁴¹ It should not be forgotten that around 1936 direct foreign investment in industry in relation to the stock in industry approached or surpassed 50% in Romania, Yugoslavia and Bulgaria, and thus achieving rates which were significantly higher than those in Czechoslovakia or Hungary because capital formation out of domestic sources was comparatively weaker in the agrarian economies of Southeast Europe (Nötel 1986, p. 277, Teichova 1985, p. 292).

⁴² Undoubtedly, this collapse of capital imports to a certain degree resulted from many long-term projects, which during the 1920s in Southeast Europe, had been financed by short-term loans, which in turn were almost completely called in during the Great Depression (Calic 1998, pp. 352-353, Zolotas 1926, p. 105, Spigler 1986, p. 146, Lampe 1986, p. 70).

European states saw themselves as an integral part of Europe and cut off from the path of progress were Western Europe advanced only by subjugation under the Ottoman yoke. After independency they therefore would return to their 'natural', i.e. European path of development. Additionally, they felt that only a fast Europeanization would guarantee their survival as independent states and allow them to fulfill their 'national mission' of creating 'Greater Greece', 'Greater Romania' etc. Thus, 'mimetic modernization' was considered as the only road to sovereignty (Petmezas 2011, p. 24).

The starting point for industrial policy and relevant legislations in Southeast Europe can be dated back to the 1880s when the sector of modern industry did contribute considerably less than 5% to national product in all Balkan countries.⁴³ Strongly influenced by Friedrich List's infant-industry-argument Romania levied tariffs in 1886 to protect its native industry. More or less twenty years later educational tariffs were introduced in all Southeast European states. Finally, tariff protection for industry had persisted until the Second World War and increased significantly after 1918. A decade earlier than Bulgaria and Serbia Romania gave in 1887 direct encouragement to larger mechanized enterprises via a bundle of measures like tax exemptions, railway rebates, guaranteed public purchases and granted profits for certain industries etc. Indeed, in 1906 two thirds of all Romanian factory enterprises received state support. The same tendency could be observed for Bulgaria and even in Serbia one quarter of all industrial plants obtained subsidies. To sum up, the effectiveness of all these manifold governmental measures is assessed as more or less ineffective and partly destructive.

The negative effects of strongly over-valuated currencies on domestic industries' competitiveness could not be compensated by import tariffs. But, whether or not import substitution occurred did not depend on tariffs. In general, supported industrial branches did not grow faster than others. More than anything else, tariff policy was oriented to the urging fiscal needs of Balkan states and not to requirements of economic development. Furthermore, by vigorously lobbying domestic industrialists managed it to transform temporary educational tariffs into lasting and constantly increasing protection for their inefficient industries. The design of educational tariffs often took place to somehow serve the short-term interests of the ruling party's or government's own clientele but not to foster growth in the long run. The domineering corruption and inefficiency on all levels of administration substantially contributed to the inefficacy of industrial policies. Even if governments showed an unexpected level of activity, it would be too hasty a conclusion to speak of a coordinated and target oriented modernization or industrial policy as the case of Romania will show most clearly. Since its foundation in 1861 the Romanian state, which then was located between three great Empires, had had a tendency to autarky and preserved this economic policy especially under the influence of the powerful Liberal Party which represented the industrial interests.⁴⁴ Domestic industries were among other reasons explicitly supported to block the inflow of foreign capital. Thus, it comes as no surprise that once the conditions for foreign investors had been improved, Romanian oil production could soar up and the country became one of the world's largest oil exporters before 1914. Further, counterproductive actions involved campaigns against industrial manufacturing dominating Jewish and German entrepreneurs to foster native Romanian ones (Lampe und Jackson 1982, pp. 264-277, Turnock 1977, Leontieş 1971, Schmalz 1921, pp. 123-135, Jackson 1986, Calic

⁴³ Including mining in modern industry Romania's share could have been slightly higher but the petroleum boom only started after 1900 (Pearton 1971, p. 36).

⁴⁴ The idea of an autarkic Romania was by no means an invention of the communist leader Nicolae Ceaucescu (1918-1989) but is deeply rooted in modern Romanian history.

1994, pp. 160-169, Krikner 1913, Palairret 1997, pp. 270-271, Lampe 1986, pp. 38-42, Ivanov and Tooze 2007, p. 684, Drabek 1985, pp. 408-413).

Turning to the role of Balkan authorities played, three points are meaningful: Firstly, a premature growth of the administration, which, in all Balkan states, both grew faster than population and was more numerous than the modern factories' labour force on the eve of the First World War, secondly, high military expenses and thirdly, non-profitable investments in railways. It was for these reasons that "the Balkan governments' weight in their respective economies was potentially far heavier than that of their Western and Central European counterparts" (Lampe and Jackson 1982, p. 233).⁴⁵ According to estimations from Lampe and Jackson in Southeast Europe around 1910 between 20% (Bulgaria) and 30% (Romania) of income were extracted by the state (1982, pp. 233-234). To repay the public debts tax revenues had sharply increased in all Southeast European states since the 1880s. Since the bigger share of the expanding state revenues accrued from steeply rising indirect taxes, purchasing power and consumption of the population significantly fell, a development that was exacerbated in the face of heavily rising living costs, due to price increases in essential goods provided by state monopolies. According to all scholars and many contemporary experts the extraordinary tax burden contributed to diminish the effective market demand especially for industrial goods. This hampered the development of domestic markets, and thus industrialization. This was all the more true because soaring public expenditures did hardly serve to the purpose of financing growth-enhancing public investments rather it was wasted on 'symbolic modernization'. Still in the 1930s Southeast Europe's governments tried to avoid any recession-induced deficit spending and instead increased indirect taxes during the Great Depression (Palairret 1979, 1997, p. 180, p. 305, Berend and Ránki 1982, pp. 70-72, pp. 123-126, Lampe and Jackson 1982, pp. 232-235, p. 501, Drabek 1985, p. 413, Radice 1985, p. 44, Spigler 1986, p. 141, p. 159, Lampe 1986, pp. 29-30).

During the 1920s industrial and economic policy had followed the unsuccessful patterns of the pre-war period. Existing tendencies like economic nationalism despite small domestic markets, protectionism and direct state support were intensified.⁴⁶ However, even if Southeast-European states in general gathered large funds through excessive interventions into the economy, largely by state monopolies, these funds mostly were used in an unproductive manner (Teichova 1985, p. 289).⁴⁷ And again resource-rich Romania, which was seen as ready for industrialization by contemporary experts in 1918, was leading, by enforcing a radical and counterproductive 'nostrification-policy' (Turnock 1977, p. 347). So, when Romania tried to nationalize its oil production, it produced a shortage of capital in this strategic sector. Oil production started to soar up again when the conditions for foreign direct investments had been eased so that the necessary investments could take place. In this place, it has to be stressed, that, under the conditions of a domestic shortage of capital the latent hostility to foreign direct investment was not the only reason for the comparatively slow Romanian industrial growth even in a Southeast European comparison. However, according to many scholars Romania and Yugoslavia showed the lowest industrial growth

⁴⁵ All over Southeast Europe except Romania public employment continued to grow faster than the population during the interwar period. However, even in Romania more people were employed in the public sector (340,000) than in industrial manufacturing (290,000) on the eve of the Second World War (Lampe and Jackson 1982, p. 503).

⁴⁶ In interwar Bulgaria the state-supported sector of the industry produced two thirds of the value of the industrial output. In Romania at the end of the 1930s the state bought about 70 % of the coal output and 80% of metallurgy industry's output (Teichova 1935, pp. 282-288).

⁴⁷ State debts per capita increased strongly in all Southeast European countries during the 1920s but this time it was due to reparations and war debts (Lampe and Jackson 1982, pp. 376-402).

of all Balkan states during the interwar period mainly because they had to shoulder the burden of integrating very different regions within greatly enlarged or in fact newly formed states. New domestic markets had to be created out of regions which before 1918 had been isolated from each other for centuries. The loss of large imperial markets especially those of the Habsburg Empire was undeniable an obstacle to growth in many Southeast European regions. Although, this was already an undisputed fact among contemporaries all efforts to deepen economic integration were doomed to failure due to prevalent economic nationalism. And so, a Danubian Economic Union between the independent successor states of the Habsburg Empire or a Balkan Customs Union failed to be established. This was all the more detrimental to industrial development because the loss of the large imperial Ottoman and Habsburg markets together with the increasing level of protectionism all over the world aggravated one fundamental problem of all Southeast European states: the small size of their domestic markets (Georgieva 1998, Lampe and Jackson 1982, pp. 402-433, pp. 588-592, Lethbridge 1985 pp. 591-593, Jackson and Lampe 1983, p. 387, Radice 1985, p. 35, pp. 42-44, Turnock 1977, Calic 1998, Berov 1989).⁴⁸

In the 1930s, state intervention into the economy reached a new quality when the Balkan states strengthened efforts to accelerate industrialization in response to the Great Depression and the World Agricultural Crisis. On the one hand, for all Southeast European governments there was the urgent need to prevent a collapse of their economies under the conditions of disintegrating world (food) markets and further increasing protectionism as well as bilateralism. On the other hand industrialization became an imperative necessity since a further concentration on agricultural exports would have offered no alternative to fight underdevelopment and ensure sovereignty in the long run. In contrast to previous times state intervention now became official economic policy and vague economic theories of state intervention started to replace the previous, purely politically motivated economic nationalism. The new practice of tremendously increased state intervention towards combining industrialization with self-sufficiency was mainly borrowed from Nazi-Germany and paved the way to a centrally planned economy which was introduced all over Southeast Europe except Greece after 1945.

During the 1930s foreign trade and capital transactions came under strict control of the state. Non-tariff trade barriers including import bans and import monopolies were introduced on a large scale for the first time. Because of the nearly complete control of foreign trade and international capital flows, Southeast European states were able to directly and indirectly influence if not control all important sectors of the economy including modern industry. Furthermore, state authorities implemented compulsory cartels and strict price controls. More and more public banks overtook industrial finance after the banking crisis of 1931. However, except armament industry the new policy of state planning was not connected with the expansion of state property. On the one hand, Southeast European states were forced to react to the near collapse of their primary commodity-based exports and the sudden stop of capital imports. Indeed, an autarkic policy in Southeast Europe

⁴⁸ Calic writes: „The unification of the Yugoslav economy therefore, represented an extremely demanding task. When in 1918 the Yugoslav lands were unified, there were six customs areas, five currencies, four railway networks, three types of banking systems, and a large number of other socio-economic divergences. ... Moreover, there has not been very much co-operation between the South Slavic lands before 1918. Slovenia, Croatia, Bosnia-Herzegovina and Serbia were competing for access to the Central European markets, rather than developing inter-regional trade. Before and during World War I the level of economic integration of the Yugoslav lands was extremely low, and mutual knowledge about various regions was generally poor” (1998, p. 332). In addition, Yugoslavian economic policy completely ignored the large development differences within Yugoslavia (Calic 1998, pp. 343-346, Teichova 1985, p. 258).

could not be avoided without radical trade liberalizations on their export markets. But, quite the opposite happened. Agrarian protectionism reached new dimensions in the industrialized countries. Under the given conditions the huge external deficits could only be balanced out by strict import and capital controls. On the other hand, in the face of the ongoing destruction of the multilateral trade system and the intensified instability within the region due to the rise of war-preparing Nazi-Germany a consequent import substitution and massive state interventions in general were seen as a useful if not the only way to maintain or accelerate industrialization. Indeed, as regards industrial goods for the first time import substitution could be realized in all Southeast European countries and at least imports of industrial consumer goods nearly disappeared.⁴⁹ There is some evidence that it was these drastic import cuts that primarily gave greater opportunities for domestic industries and not so much the rise of clearing trade with Nazi-Germany which earlier was assumed as a powerful impetus for industrialization (Teichova 1985, p. 236, Ránki and Tomaszewski 1986, p. 5, pp. 21-48, Jackson and Lampe 1982, pp. 461-519, Drabek 1985, pp. 460-466, Georgieva 1998).

Carried by measures of excessive and effective protectionism as well as state interventionism Balkan industrial growth had continued during the 1930s and, in a European comparison, clearly stayed above average. However, this policy implied high costs for the society. First estimations by the Bulgarian historian Berov suggest that over the entire period the losses for society incurred in the name of industrialization were 2.5 to 3 times higher than the societal gains (Georgieva 1998, p. 289). To validate this important point, however, much more research is necessary. The massive state interventions into manufacturing industry, which since the end of the 19th century were mainly motivated by political and fiscal reasons, resulted in a lasting isolation of Balkan industries from the world market with manifested effects to date. According to Lampe and Jackson Southeast European industries still have severe difficulties with the quality of their production and they are not competitive on foreign and domestic markets (Lampe and Jackson 1982, p. 575). This dictum, though from the beginning 1980s, is still valid even for Greece that – up to now – has never had to implement centrally planned economy and has been integral part of the Western world since the Second World War.

However, during the period under consideration and especially in the 1930s the ground was prepared for rapid industrialization after the Second World War. All Southeast European states made significant advance in public education and technical training. Bulgaria was leading in primary and in secondary schooling as well as higher education. It achieved complete mass literacy in 1945. Only Yugoslavia was lagging somewhat behind. Higher education in all four countries increased – more precisely boosting several times compared to the period before the First World War - and technical study courses expanded strongly everywhere. In addition, demographic transition had progressed significantly in all Southeast European countries, yet, in the case of Bulgaria, it was already completed before the Second World War (Lampe and Jackson 1982, pp. 502-503, Ivanov and Tooze 2007, p. 698, Ehrlich 1985, Hauner 1985, p. 92, p. 96).

⁴⁹ In Bulgaria, the import percentage of domestic consumption of industrial goods decreased from 38.5 to 13.7% (1929-1934), in Greece from 41.4 to 25.6% (1928-1937), in Romania from 34.2 to 21.45 (1928-1938), in Yugoslavia this share amounted to 18.6% in 1938 (Lampe and Jackson 1982, p. 486). However, it should not be forgotten that the total domestic consumption of industrial goods had fallen all over Southeast Europe during the 1930s.

4. Conclusions

The prospects for industrialization and catching-up growth were rather gloomy in Southeast Europe around 1870. As already worked out paradigmatically by Berend and Ránki adopting the Gerschenkron line of reasoning the Balkan societies and economies were too backward to initiate successful catching-up growth or to exploit any advantages of backwardness to speed up industrialization. Some scholars argue that the primitive state of agriculture was responsible for the large development gap. However, Southeast Europe's low productive agriculture was not the cause but the consequence of underdevelopment. During the long 19th century a productivity enhancing intensification of agriculture could only have taken place in Southeast Europe – as elsewhere in Europe – in response to a dynamic and large domestic urban-industrial sector. The latter definitely did not exist in the Balkans. Moreover, applying Thünen economics it can be shown that in the European periphery a booming agricultural export was conducive only to extensive growth hardly being able to create large surpluses for industrial capital formation. Having in mind the factor endowments of Southeast Europe's economies under the conditions of the first globalization a concentration of scarce capital in agriculture and trade was a perfect adjustment to markets by peasants, large estate owners and merchants. Moreover, due to the fact that land was abundant and accessible to poor households the industry of the newly independent Balkan states – except to a certain degree Romania – could not compete with agriculture for labour. Looking at Bulgaria real wages rose after 1880 not because of productivity increases as assumed by Pamuk and Williamson but because of the perfect adjustment of peasants to the existing rural land, labour and commodity markets. The so-called “Lewis-problem” — excessively high real wages in modern industry — seemed to continue to exist regardless of trends in the terms-of-trade for industrial goods as long as land was available to peasants.

Theoretically modern capital markets could have contributed to alleviating capital scarcity. Indeed, the development of modern banking proceeded fast in all Southeast European countries and capital imports started to grow tremendously very early. However, modern banks in Southeast Europe were fixated on financing public debts. Capital imports mainly flew into the public sector and were hardly used for productive investments. Industrial finance was severely hampered by crowding out of private investments. Indeed, still on the eve of the First World War premature, oversized and unproductive public sectors, which employed more people than modern industry, consumed a larger share of national income than those in contemporary high-income Central and Western European countries. Excessive taxation of consumers to repay excessively high public debts further reduced the demand for industrial goods on the rather small domestic markets. In fact, industrial capital formation through domestic sources could only proceed slowly under these circumstances. In industry it was not possible to substitute labour for capital due to a lack of skilled labour which was rather expensive. This worked only in agriculture which depended much more on unskilled labour.

A coordination of all policies including monetary policy to promote industrialization did not occur. A consistent policy to foster industrialization was not realized in a single Balkan country even though Southeastern European governments started early to interfere heavily in the industrial sector and often in a contradictory way. More than anything else, industrial policy was dominated by fiscal needs, politically motivated economic nationalism, corruption and clientelism. From the beginning import substitution was a main target to promote domestic industry. Finally, this policy contributed to guaranteeing the existence of non-competitive industries producing low-quality products at much too high prices. Nevertheless it should not be forgotten that until the Great Depression the

adherence to tight monetary policy as demanded by the international creditors had resulted in extraordinary high real interests and overvalued exchange rates which both very probably proved harmful to industrial growth and development, in fact much more than any ill-designed industrial policy.

Altogether, it can be concluded that public policy greatly failed to make any substantial contributions to promoting industrial growth before the Great Depression. During the difficult 1930s Southeast European governments had managed at least to maintain an above average industrial growth even though at high costs for the society. However, having in mind the adverse economic conditions especially those during the interwar period, the internal Southeast European weaknesses should not be overemphasized when it comes to explaining the slow pace of industrial growth. The same goes for the period of the first globalization before the First World War. Even if Southeast European states would have avoided oversized public sectors and sovereign defaults, it is more than doubtful that industrialization would have followed the way to sustained growth before the outbreaks of the two World Wars in 1914 or 1939.

References

- ALDCROFT, DEREK H. (2006): *Europe's Third World. The European periphery in the interwar years*, Aldershot: Ashgate.
- BAIROCH, PAUL (1976): *Europe's Gross National Product: 1800-1975*, *Journal of European Economic History* **5/2**, 273-340.
- BAIROCH, PAUL (1985): *Die Landwirtschaft und die industrielle Revolution 1700–1914*, in: Cipolla, C. M., Borchardt, K. (ed.), *Europäische Wirtschaftsgeschichte*, Vol. 3, Stuttgart u.a. 1985, pp. 297–332.
- BEREND, IVÁN (1985): *Agriculture*, in: Kaser, M. (ed.), *The Economic History of Eastern Europe 1919-1975*, Vol. 1, Oxford: Clarendon Press, pp. 148-209 (Reprint 2006).
- BEREND, IVÁN and GYÖRGY RÁNKI (1982): *The European periphery and industrialization 1780-1914*, Cambridge: Cambridge University Press.
- BEROV, LJUBEN (1973): *Tendenzen der Reallohnentwicklung in den Balkanländern im Kapitalismus (bis 1944)*, *Jahrbuch für Wirtschaftsgeschichte* 1973/IV, pp. 57-78.
- BEROV, LJUBEN (1975): *Transport costs and their in trade in the Balkan lands in the 16th – 19th century*, *Bulgarian Historical Review* **4**, pp. 74-98.
- BEROV, LJUBEN (1989): *Industrialisierungspolitik und soziale Veränderungen in Bulgarien zwischen den Weltkriegen*, in: Schönfeld, R. (ed.), *Industrialisierung und gesellschaftlicher Wandel in Südosteuropa*, München: Südosteuropa-Gesellschaft, pp. 61-86.
- BISMARCK-OSTEN, FERDINAND VON (1952): *Strukturwandlungen und Nachkriegsprobleme der Wirtschaft Griechenlands*, *Weltwirtschaftliches Archiv* **68/2**, pp. 262-322.
- BOSERUP, MOGENS (1972), *Agrarstruktur und Take off*, in: Braun, R., u.a. (ed.), *Industrielle Revolution. Wirtschaftliche Aspekte*, Köln: Kiepenheuer & Witsch, pp. 309–330 (first 1963).
- CALIC, MARIE-JANINE (1994): *Sozialgeschichte Serbiens 1815-1941. Der aufhaltsame Fortschritt während der Industrialisierung*, München: R. Oldenbourg Verlag.
- CALIC, MARIE-JANINE (1998): *The socio-economic development of Yugoslavia during the Inter-war period: A regional point of view*, in: in: Batou, J. and T. David (eds.), *Uneven development in Europe, 1918-1939*, Genf: Librairie Droz SA, pp. 327-355.
- CAMPBELL, BRUCE (2010): *Agriculture and national incomes in Europe, c. 1300-1850*. Plenary lecture at the Rural History 2010, University of Sussex, Falmer, Brighton, 13-16 September 2010. http://www.qub.ac.uk/schools/gap/Staff/AcademicStaff/ProfBruceCampbell/FileStore/Filetoupload_208573,en.pdf (accessed 03 April 2012).
- CHRISTODOULAKI, OLGA (2001): *Industrial growth in Greece between the wars: A new perspective*, *European Review of Economic History* **5**, pp. 61-89.
- DRABEK, Z. (1985): *Foreign Trade Performance and Policy*, in: Kaser, M. (ed.), *The Economic History of Eastern Europe 1919-1975*, Vol. 1, Oxford: Clarendon Press, pp. 379-531 (Reprint 2006).
- ELLIS, FRANK (1996), *Peasant economics. Farm households and agrarian development*, Cambridge: Cambridge University Press.

ENGEL, ERNST (1866): Die Grösse, Beschaffenheit und Besteuerung der Fläche des preussischen Staatsgebietes, *Zeitschrift des Königlich Preussischen Statistischen Bureaus* **6**, no 1 and 7, pp. 162-209.

FEIS, HERBERT (1974): Europe the world's banker 1870-1914, Clifton: Augustus M. Keeley Publishers (first 1930).

FOREMAN-PECK and PEDRO LAINS (2000): European economic development: the core and the southern periphery, 1870-1910, in: Pamuk, Ş. and J. G. Williamson (eds.), *The Mediterranean response to globalization before 1950*, London: Routledge, pp. 76-106.

FRERIS, A.F. (1986): *The Greek economy in the twentieth century*, New York: St. Martin's press.

GEORGIEVA, MARIA (1998): Industry and protectionism in South-Eastern Europe during the Inter-war period: A path to modernization?, in: Batou, J. and T. David (eds.), *Uneven development in Europe, 1918-1939*, Genf: Librairie Droz SA, pp. 277-297.

GERSCHENKRON, ALEXANDER (1962): *Economic Backwardness in Historical Perspective. A Book of Essays*, Cambridge, Massachusetts: Belknap Press.

GOOD, DAVID F. and TONGSHU MA (1999): The economic growth of Central and Eastern Europe in comparative perspective, 1870-1989, *European Review of Economic History* **3/2**, pp. 103-137.

GROSS, HERMANN (1937): *Südosteuropa. Bau und Entwicklung der Wirtschaft*. Leipzig: Universitätsverlag Robert Noske.

HARLAFTIS, GELINA (2011): Maritime transport systems in Southeastern Europe in the nineteenth century: the impact on trade, in: in: E. Eldem, S. Petmezas (ed.), *The Economic Development of Southeastern Europe in the 19th Century*, Athens: Alpha Bank, Historical Archives, pp. 397-445.

HARRE, ANGELA (2009): *Wege in die Moderne. Entwicklungsstrategien rumänischer Ökonomen im 19. Und 20. Jahrhundert*, Wiesbaden: Harrasowitz.

HAUNER, M. (1985): Human Resources, in: Kaser, M. (ed.), *The Economic History of Eastern Europe 1919-1975*, Vol. 1, Oxford: Clarendon Press, pp. 66-147 (Reprint 2006).

IANEVA, SVETLA (2011): Main characteristics and changes in industrial activity in the Central Balkans during the 'Long Nineteenth Century', in: in: E. Eldem, S. Petmezas (ed.), *The Economic Development of Southeastern Europe in the 19th Century*, Athens: Alpha Bank, Historical Archives, pp. 197-224.

IVANOV, MARTIN (2006): *Bulgarian National Income between 1892 and 1924*, Bulgarian National Bank Discussion Papers, Nr. 54.

IVANOV, MARTIN and ADAM TOOZE (2007): Convergence or decline on Europe's Southeastern Periphery? Agriculture, Population, and GDP in Bulgaria, 1892-1945, *Journal of Economic History* **67/3**, pp. 672-704.

JACKSON, MARVIN R. (1982): National product and income in Southeastern Europe before the Second World War, *ACES Bulletin* **24/3**, pp. 73-103.

JACKSON, MARVIN R. (1985): Comparing the Balkan Demographic Experience 1860 to 1970, *Journal of European Economic History* **14/2**, pp. 223-272.

JACKSON, MARVIN R. (1986): Industrial output in Romania and its historical regions, 1880 to 1930, part I – 1880 to 1915, *Journal of European Economic History* **15/1**, pp. 59-113.

- JACKSON, MARVIN R. (1986): Industrial output in Romania and its historical regions, 1880 to 1930, part II – 1913 to 1930, *Journal of European Economic History* **15/2**, pp. 231-257.
- JACKSON, MARVIN R. and JOHN R. LAMPE (1983): The evidence of industrial growth in Southeastern Europe before the Second World War, *East European Quarterly* **16/4**, pp. 385-415.
- KOPSIDIS, MICHAEL (2012): Peasant Agriculture and Economic Growth: The case of Southeast Europe c. 1870-1940 reinterpreted, Paper presented at the European Social Science History Conference 2012, Glasgow, 11-14 April: <http://www2.iisg.nl/esshc/programme.asp?selyear=12&pap=11276>.
- KOPSIDIS, MICHAEL and NIKOLAUS WOLF (2012): Agricultural productivity across Prussia during the industrial revolution: a Thünen perspective, *Journal of Economic History* **72/3**, pp. 633-669 (in print).
- KOSTELENOS, GEORGIOS (1995): Money and Output in Modern Greece: 1858-1938, Athen: KEPE.
- KOSTELENOS, GEORGIOS (2006): Makrooikonomika megethi, in: Kostis, K. and S. Petmezas (eds.), *I anaptyxi tis Ellinikis oikonomias kata ton 19o aiona (1830-1914)*, Athens: Alpha Bank, Historical Archives, pp. 39-79.
- KOSTELENOS, GEORGIOS, DIMITRIOS WASILIOU, EMMANOUIL KOUNARIS, SOCRATES PETMEZAS, MICHAEL SFAKIANAKIS (2007): *Akatharisto Egchorio Prion 1830-1939*, Athen: KEPE.
- KRIKNER, JOVAN (1913): *Industrie und Industriepolitik in Serbien*, Halle a. S.: Heinrich John.
- LAINS, PEDRO (2002): Southern European Economic Backwardness Revisited. The Role of Open Economic Forces in Portugal and the Balkans, 1870-1913, *Scandinavian Economic History Review* **50/1**, pp. 24-43.
- LAMER, MIRKO (1938): Die Wandlungen der ausländischen Kapitalanlagen auf dem Balkan, *Weltwirtschaftliches Archiv* **48/3**, pp. 470-524.
- LAMPE, JOHN R. (1975): Varieties of unsuccessful industrialization: The Balkan states before 1914, *Journal of Economic History* **35/1**, pp. 56-85.
- LAMPE, JOHN R. (1986): *The Bulgarian Economy in the Twentieth Century*, New York: St. Martin's Press.
- LAMPE, JOHN R. and MARVIN R. JACKSON (1982): *Balkan Economic History, 1550-1950*, Bloomington: Indiana University Press.
- LAPAVITSAS, COSTAS (2006): Industrial development and social transformation in Ottoman Macedonia, *Journal of European economic history* **35/3**, pp. 661-710.
- LETHBRIDGE, E. (1985): National Income and Product, in: Kaser, M. (ed.), *The Economic History of Eastern Europe 1919-1975*, Vol. 1, Oxford: Clarendon Press, pp. 532-597.
- LEONTIEȘ, DEMETRIUS (1971): *Die Industrialisierung Rumäniens bis zum Zweiten Weltkrieg*, München: Belej.
- LEWIS, W. ARTHUR (1963): Economic Development with Unlimited Supply of Labour, in: Agarwala, A.N. and S.P. Singh (eds.), *The Economics of Underdevelopment*, New York: Galaxy Book, pp. 400-449 (first 1954).
- LYBERATOS, ANDREAS (2011): From Imperial to National Lands: Bulgarian Agriculture from the Russian-Ottoman (1877-78) to the Balkan Wars (1912-13), in: E. Eldem, S. Petmezas (ed.), *The Economic Development of Southeastern Europe in the 19th Century*, Athens: Alpha Bank, Historical Archives, pp. 137-172.

MADGEARU, VIRGIL N. (1911): Zur industriellen Entwicklung Rumäniens. Die Vorstufen des Fabriksystems in der Walachei, Weida i. Th.: Thomas & Hubert.

MANOILESCU, MIHAIL (1935): Arbeitsproduktivität und Außenhandel. Ein neuer Beitrag zur Theorie des internationalen Handels, *Weltwirtschaftliches Archiv* **42/1**, pp. 13-43.

MAZOWER, MARK (1991): Greece and the interwar economic crisis. Oxford: Clarendon Press.

MOORE, WILBERT E. (1945): Economic Demography of Eastern and Southern Europe, Genf: League of Nations.

MORYS, MATTHIAS and MARTIN IVANOV (2011): Business cycles in South-East Europe from independence to the end of the Cold War, Centre for Historical Economics and Related Research at York, DP 11/02.

NICOLAE-VĂLEANU, IVANCIU (1982): Theories of the evolution and structure of inter-war Romanian economy, *Revue roumaine des sciences sociales* **1-2**, pp. 145-165.

NÖTEL, R. (1986): International Credit and Finance, in: Kaser, M. C. and E. A. Radice (ed.), The Economic History of Eastern Europe 1919-1975, Vol. 2, Oxford: Clarendon Press, pp. 170-295.

PALAIRET, MICHAEL (1979): Fiscal pressure and peasant impoverishment in Serbia before World War I, *Journal of Economic History* **39/3**, pp. 719-740.

PALAIRET, MICHAEL (1983): The decline of the old Balkan woollen industries, c. 1870-1914, *Vierteljahrschrift für Sozial- und Wirtschaftsgeschichte* **70**, pp. 331-362.

PALAIRET, MICHAEL (1997): The Balkan Economics, c. 1800-1914, Cambridge: Cambridge University Press.

PAMUK, ŞEVKET (1987): The Ottoman Empire and European capitalism, 1820-1913: Cambridge: CUP.

PAMUK, ŞEVKET (2011): Estimating and Explaining Economic Growth in Nineteenth-Century Southeastern Europe and Eastern Mediterranean, in: E. Eldem, S. Petmezas (ed.), The Economic Development of Southeastern Europe in the 19th Century, Athen: Alpha Bank, Historical Archives, pp. 225-250.

PAMUK, ŞEVKET and JEFFREY G. WILLIAMSON (2011): Ottoman de-industrialization, 1800-1913: assessing the magnitude, impact, and response, *Economic History Review* **64 S1**, pp. 159-184.

PAPAKONSTANTINOIU, KATERINA (2011): Transport and Communication in Southeastern Europe in the Nineteenth Century: The Impact on Trade, in: E. Eldem, S. Petmezas (ed.), The Economic Development of Southeastern Europe in the 19th Century, Athen: Alpha Bank, Historical Archives, pp. 349-395.

PASVOLSKY, LEO (1928): Economic nationalism of the Danubian states, New York: MacMillan.

PEARTON, MAURICE (1971): Oil and the Romanian State, Oxford: Clarendon Press.

PETMEZAS, SOCRATES (1990): Patterns of protoindustrialization in the Ottoman Empire. The case of Eastern Thessaly, c. 1750-1860, *Journal of European Economic History* **19/1**, pp. 575-603.

PETMEZAS, SOCRATES (2009): Agriculture and economic growth in Greece, 1870-1973, in: P. Lains, V. Pinilla (ed.), Agriculture and Economic Development in Europe since 1870: London: Routledge Press, pp. 353-377.

PETMEZAS, SOCRATES (2011a): Introduction, in: E. Eldem, S. Petmezas (ed.), *The Economic Development of Southeastern Europe in the 19th Century*, Athen: Alpha Bank, Historical Archives, pp. 19-46.

PIPER, WOLFGANG (1961): *Grundprobleme des wirtschaftlichen Wachstums in einigen südosteuropäischen Ländern in der Zwischenkriegszeit*, Berlin: Duncker & Humblot.

POLLARD, SIDNEY (1981): *Peaceful conquest. The industrialization of Europe 1760-1970*, Oxford: Oxford University Press (reprinted 2002).

POLLARD, SIDNEY (1998): *The Peripheral European Countries in the 19th Century*, in: Batou, J. and T. David (eds.), *Uneven development in Europe, 1918-1939*, Genf: Librairie Droz SA, pp. 59-83.

PREDESCU, NICOLAE ST. (1940): *Die Wirtschaftsstruktur Rumäniens in ihren Wesensmerkmalen und Entfaltungsmöglichkeiten*. Dresden: Verlag M. Dittert & Co.

QUATAERT, DONALD (2011): *Industry, Labour and Technology Transfer in the Southeastern Balkans and Aegean Coast of Anatolia and Istanbul, 1830-1922*, in: E. Eldem, S. Petmezas (ed.), *The Economic Development of Southeastern Europe in the 19th Century*, Athen: Alpha Bank, Historical Archives, pp. 173-196.

RADICE E. (1985): *General Characteristics of the Region between the Wars*, in: Kaser, M. (ed.), *The Economic History of Eastern Europe 1919-1975, Vol. 1*, Oxford: Clarendon Press, pp. 23-65 (Reprint 2006).

RÁNKI, GYÖRGY and J. TOMASZEWSKI (1986): *The role of the state in industry, banking and trade*, in: Kaser, M. C. and E. A. Radice (ed.), *The Economic History of Eastern Europe 1919-1975, Vol. 2*, Oxford: Clarendon Press, pp. 3-48.

ROBERTS, HENRY L. (1951): *Political Problems of an Agrarian State*, New Haven: Yale University Press (Reprint 1969).

ROTH, ROLF W. (1940): *Die Industrialisierung des Balkans mit besonderer Berücksichtigung Rumäniens und Bulgariens*, PhD thesis: University of Bern.

ROYAL INSTITUTE OF INTERNATIONAL AFFAIRS (1936): *The Balkan states, 1. Economic: A review of the economic and financial development of Albania, Bulgaria, Greece Roumania, and Yugoslavia since 1919*, London: Oxford University Press.

SCHMALZ, FRIEDRICH (1921), *Großrumänien: wirtschaftlich, politisch und kulturell*, Gotha: Perthes.

SPIGLER, I. (1986): *Public Finance*, in: Kaser, M. C. and E. A. Radice (ed.), *The Economic History of Eastern Europe 1919-1975, Vol. 2*, Oxford: Clarendon Press, pp. 117-169.

STAJIC, STEVAN (1959): *Nacionalni dohodak Jugoslavije 1923-1939 u stalnim i tekućim cenama*, Belgrad: Ekonomski Institut Nr Srbije.

STASSINOPOULOS, YOURGOS (2011): *The Political Economy of Money and Banking in Greece before 1914: An overview*, Papakonstantinou, in: E. Eldem and S. Petmezas (ed.), *The Economic Development of Southeastern Europe in the 19th Century*, Athen: Alpha Bank, Historical Archives, pp. 307-334.

SUNDHAUSEN, HOLM (1989a): *Historische Statistik Serbiens 1834-1914*, München: R. Oldenbourg Verlag.

SUNDHAUSEN, HOLM (1989b): Die verpaßte Agrarrevolution. Aspekte der Entwicklungsblockade in den Balkanländern vor 1945, in: Schönfeld, R. (ed.), *Industrialisierung und gesellschaftlicher Wandel in Südosteuropa*, München: Südosteuropa-Gesellschaft, pp. 45-60.

TEICHOVA, A. (1985): Industry, in: Kaser, M. (ed.), *The Economic History of Eastern Europe 1919-1975*, Vol. 1, Oxford: Clarendon Press, pp. 222-322 (Reprint 2006).

TILLY, RICHARD H. (1990): *Vom Zollverein zum Industriestaat. Die wirtschaftliche-soziale Entwicklung Deutschlands 1834 bis 1914*, München: DTV.

TOMASEVICH, JOZO (1955): *Peasants, Politics, and Economic Change in Yugoslavia*. Stanford: Stanford University Press (Reprint 1975).

TURNOCK, DAVID (1977): The industrial development of Romania from the unification of the principalities to the Second World War, in: F.W. Carter (eds.), *An historical geography of the Balkans*, London: Academic Press, pp. 319-378

TURNOCK, DAVID (1986): *The Romanian Economy in the twentieth century*, London: Croom Helm.

VINSKI, IVO (1961): National Product and Fixed Assets in the Territory of Yugoslavia, 1909-59, in: Deane, P. (ed.), *Studies in Social and Financial Accounting*, London: Bowes & Bowes, pp. 206-233.

VINSKI, IVO (1967): The distribution of Yugoslavia's national income by social classes in 1938, *Review of Income and Wealth* 3, pp. 259-281.

WILLIAMSON, JEFFREY G. (2000): Real wages and relative factor prices around the Mediterranean, 1500-1940, in: Pamuk, Ş. and J. G. Williamson (eds.), *The Mediterranean response to globalization before 1950*, London: Routledge, pp. 45-75.

WILLIAMSON, JEFFREY G. (2006): *Globalization and the poor periphery before 1950*, Cambridge (Massachusetts): The MIT Press.

WILLIAMSON, JEFFREY G. (2011): *When the Third World Fell Behind*, Cambridge (Massachusetts): The MIT Press.

ZOLOTAS, XENOPHON (1926): *Griechenland auf dem Weg zur Industrialisierung*, Leipzig: Teubner.

Table 1: GDP per head according to Maddison, 1870-1938 (Western Europe Total 12 =100, 1990 International Geary-Khamis dollars)

	1870	1913	1938	1870	1913	1938	1870-1913 [#]	1913-1938 [#]	1870-1938 [#]
Greece	880	1,592	2,677	42	43	55	1.46	2,10	1,65
Bulgaria	840	1,534	1,595	40	42	33	1.48	0,61	0,95
Romania	931	1,741	1,242	45	47	26	1.54	-1,34	0,42
Yugoslavia	599	1,057	1,356	29	29	28	1.39	1,00	1,21
Western Europe 12*	2,080	3,687	4,833	100	100	100	1.41	1,09	1,25

Source: Maddison (2009): <http://www.ggdc.net/MADDISON/oriindex.htm>, own calculation.

Notes: *Western European 12 corresponds to the countries of the "European core"

[#]Annual growth rates.

Table 2a: Growth rate of GDP per head according to different authors, 1870-1913

Authors	Bulgaria	Greece	Yugoslavia	Romania	Europe
Good & Ma	1.30	--	1.30	1.40	1.20
Maddison	1.48	1.46	1.39	1.54	--
Bairoch	0.42	0.59	0.49	1.10	0.93
Lains	0.42	0.54	0.49	1.10	--
Ivanov 1892-1911	0.02	--	--	--	--
Palaret 1890-1910*	-0.29	--	--	--	--
Kostelenos 1870-1910	--	0.73	--	--	--
Palaret 1870-1910*	--	--	** -0.59	--	--

Sources: Good and Ma (1999, p. 113), Table 1, Bairoch (1976, p. 286, p. 297), Lains (2002, p. 31), Ivanov (2006, p. 15), Kostelenos (2006), Kostelenos et al. (2007, p. 159-180, p. 195), Palaret (1997, p. 366-67).

Notes: *The estimations of Palaret refer to the per capita output of farm population 1889/92 and 1908/11 which is a useful approximation to GDP per head for the time before 1914. ** This figure refers only to Serbia but Serbian figures roughly corresponded to the Yugoslavian average.

Table 2b: Population and population growth p.a., 1870-1938 (in 1000)

	1870	1910	1920	1938	1870-1910	1920-1938
Greece	3.657	5.320	5.700	7.061	0.94	1.20
Bulgaria	2.586	4.520	5.072	6.564	1.41	1.44
Romania	9.179	11.866	12.340	15.601	0.64	1.31
Yugoslavia	8.252	13.052	12.422	16.084	1.15	1.45

Source: Maddison (2009): <http://www.ggdc.net/MADDISON/oriindex.htm>.

Table 3: Share of primary, secondary and other production in national income, 1870-1940*

Primary production (agriculture & side activities, forestry)						
	1870	1890	1910	1920	1930	1938
Greece	70.0	63.4	50.5	60.8	50.2	56.4
Bulgaria	--	69.3	66.4	62.9	68.5	62.2
Romania	--	--	--	--	34.1	33.9
Yugoslavia	--	--	--	60.3	53.4	52.2
Secondary production (manufacturing, handicraft & construction) plus mining						
Greece	9.9	11.8	20.0	8.9	10.3	10.4
Bulgaria	--	9.3	9.5	9.8	9.0	9.6
Romania	--	--	--	--	26.1	28.6
Yugoslavia	--	--	--	24.3	28.4	30.5
Other (tertiary) production (including public service)						
Greece	20.1	24.8	29.5	30.3	39.5	33.2
Bulgaria	--	21.4	24.1	27.3	22.5	28.2
Romania	--	--	--	--	39.9	37.5
Yugoslavia	--	--	--	15.4	18.2	17.3

Sources: for Greece see Kostelenos (2007, pp. 144-46), for Bulgaria see Ivanov and Tooze (2007, p. 685, pp. 699-700 for the years 1892, 1911, 1924, 1929, 1938), for Romania see Lethbridge (1985, p. 595), , for Yugoslavia see Stajić (1959, Table BR.7 for the years 1923, 1930, 1938).

Table 4: Occupational Structure 1910-1930*

Primary production (agriculture & side activities)			
	1910	1920	1930
Greece	49.3	58.7	56.6
Bulgaria	72.4	72.6	71.2
Romania	71.0	68.2	70.4
Yugoslavia	--	--	72.7
Secondary production (manufacturing, mining & construction)			
Greece	16.1	17.4	18.8
Bulgaria	12.5	12.8	13.3
Romania	11.4	13.2	13.7
Yugoslavia	--	--	12.5
Other (tertiary) production			
Greece	34.6	23.9	24.6
Bulgaria	15.1	14.7	15.5
Romania	17.5	18.5	15.9
Yugoslavia	--	--	14.7

Sources: Lampe and Jackson (1982, p. 336), the figures for Romania for 1910 and 1930 refer to the Old Kingdom.

Notes: *Share of gainfully occupied males per sector in all active males. For further notes see as well Lampe and Jackson.

Table 5a: The structure of secondary production (including mining), 1892-1924

	Romania 1912-13	Bulgaria 1911	Serbia 1911-13
Large-scale private industry*	64.1	55.7	41.9
Small-scale industry**	22.8	43.8	51.1
Mining and oil	13.1	0.5	7.0
Bulgaria 1892-1924***			
	<i>1892</i>	<i>1911</i>	<i>1924</i>
Rural home industry	52.5	49.5	48.8
Crafts	36.2	22.2	30.1
Large industry	3.4	17.9	12.9
Petty industry	7.9	10.4	10.1

Sources: for 1911-13 see Lampe (1975, p. 59), for Bulgaria 1892-1924 see Ivanov and Tooze (2007, p. 685, p. 699-700).

Notes: *Generally defined as an enterprise using some mechanical horsepower and employment at least 20 workers and 20,000 lei, leva or dinars in capital.

**Generally defined as artisan shops or rural household industry.

***definitions of branches according to official Bulgarian sources presented in Ivanov (2006, p. 20).

Table 5b: Modern industry and total manufacturing in Yugoslavia in 1938 (share in total net domestic output)

	Yugoslavia	
	I	II
Total Manufacturing	20.0	100.0
<i>Factory Manufacturing</i>	11.0	55.0
<i>Handicrafts</i>	5.5	27.5
<i>Rural domestic industry</i>	3.5	17.5
Mining	2.0	
Construction	1.1	
Total secondary production	23.1	

Source: Vinski (1967, p. 277).

Notes: I = share in net domestic product for Yugoslavia.

II = structure of total manufacturing (= 100).

In contrast to Stajic (Table 3) Vinski looked at net domestic output and not at gross domestic output.

Table 6a: Comparative annual real growth rates of large scale private industry, grain production, as well as mining and oil 1900-1915 (gross output)

	Romania (1901/2-1915)	Bulgaria (1904-1911)	Serbia (1901-1911)
Large-scale private industry	7.0	14.3	12.5
Mining and oil	13.4	--	21.5
Grain production	1.7	2.3	--

Source: Lampe (1975, p. 60).

Notes: For the definition of "large-scale private industry" see Table 5a.

Table 6b: Annual growth rates of industrial production during the interwar period from different Sources

	Teichova / Christodoulaki / Stajic				Lampe & Jackson
	1920s & 1930s	1920s	Great Depression	1930s	1929-1938
Greece	5.56	6.59	-1.56	8.61	5.7
Bulgaria	6.61	7.30	--	5.85	4.8
Romania	5.25	8.98	0.30	8.48	3.4
Yugoslavia*	3.86	5.66	-8.43	8.01	2.6

Source: Teichova (1985, p. 232, p. 256), Stajic (1959, p. 60-61, Table BR.1) Christodoulaki (2001, p. 74), Lampe and Jackson (1982, p. 484), own calculations.

Notes: Data for Greece 1920s & 1930s, 1920s, Great Depression, and 1930s refers to 1925-1938, 1925-1929, 1929-1932, 1932-1938, data for Bulgaria to 1921-1940, 1921-1931, 1931-1940, data for Romania to 1924-1938, 1924-1929, 1929-1932, 1932-1938, data for Yugoslavia to 1923-1939, 1923-1929, 1929-1932, 1932-1939.

*including mining.

Table 7a: Branches share in manufacturing output 1921-1938

	Bulgaria		Romania		Yugoslavia	Greece
	1921	1938	1928	1937	1938	1936
Metallurgy (1)	1.7	6.4	15.0	16.4	16.5	4.6
Chemicals	1.2	5.6	9.1	18.6	8.5	16.3
Woodworking	2.2	2.4	8.6	5.5	6.2	--
Building m. ... (2)	1.7	3.9	3.9	3.6	9.1	6.1
Food processing	84.5	47.0	30.5	20.1	29.3	18.0
Textiles ... (3)	4.9	28.9	14.3	22.2	22.1	35.7
Leather (4)	1.8	2.9	5.0	4.3	4.6	--
Papermaking (5)	1.9	2.8	4.1	4.9	3.6	--

Source: Teichova (1985, p. 248), for Greece Mazower (1991, p. 252).

Notes: (1) Metallurgy and engineering, (2) Building materials, (3) Textiles and clothing, (4) Leather and fur working, (5) paper making and printing.

Table 7b: Occupational structure of industry in Southeast Europe in the interwar period (1000s employed)

	BULGARIA		ROMANIA		YUGOSLAVIA	
	1921	1938	1928	1937	1931	1938
Mining	9,6	10,2	79	62	27	12
Metallurgy & engineering	4,5	6,5	41	51	46	58
Chemicals	0,8	2,5	20	28	11	16
Woodworking	2,3	3,4	40	44	87	42
Building materials	4	5,2	19	24	20	17
Electric power	0,2	1,8		2		8
Food	27,6	37,4	30	35	79	43
Textiles	4,5	30,6	37	70	35	75
Leather	0,8	1,4	9	12	11	14
Paper & Printing	2,3	1,7	11	15	15	11
TOTAL	56,6	103,1	286	343	331	300
Growth p.a.						
	Bulgaria 1921-38		Romania 1928-37		Yugoslavia 1931-38	
Mining	0.36		-2.66		-10.94	
Metallurgy & engineering	2.19		2.45		3.37	
Chemicals	6.93		3.81		5.50	
Woodworking	2.33		1.06		-9.88	
Building materials	1.56		2.63		-2.29	
Electric power	13.0		--		--	
Food	1.80		1.73		-8.32	
Textiles	11.94		7.34		11.50	
Leather	3.35		3.25		3.51	
Paper & Printing	-1.76		3.51		-4.33	
TOTAL	3.53		2.04		-1.39	

Source: own calculations based on Teichova (1985, p. 245).

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