Debt Crisis and Economic Development in Modern Greece: An Alternative Analysis Based on New Institutional Economics

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Abstract

The intellectual aspiration of the paper is to twofold. First the paper aims to highlight that the traditional theories of economic development are not applicable to the case of the Greek economy. Furthermore it demonstrates that the debt crisis problem is not one which appeared in 2009 but it is a constant problem for the Greek economy. Using the theoretical tool of New Institutional Economics the paper points out that the Greek economy has experienced an institutional problem throughout the 1830-2013 period. This is associated with a complex political and social evolution which created many obstacles throughout the period. These obstacles (state bureaucracy, complex legal framework, quality of labor force) continue until the current era and create barriers to economic development and establish the preconditions for a high debt.

1. Introduction

Since May 2010 the Greek state asked for international financial assistance due to the country's inability to repay its public debt and to continue to have access to loan capital from the international financial markets. Suddenly the Greek economy –which until then was considered – a developed one; has been characterized as one of the sick economies of Europe due to high public debt, high fiscal deficit, high balance of payments deficit as well as high consumption / low investment profile, which has been associated with high de-industrialization. In addition the demographic trends (i.e. ageing population) impose an immense pressure on the national insurance and health systems.

The assertion that the Greek economy is characterized by immense structural problems which minimize any potential for recovery is substantiated; however the current intellectual exercise aims to point out that the roots of the crisis are historical and institutional. We point out that during the 1830-1950 period the Greek economy due to various political, social and economic reasons failed to capture the benefits of the second industrial revolution. However the biggest drama was that Greece failed to create the necessary institutions which could trigger long term growth and prosperity.

Therefore we argue that economic crisis is not a new phenomenon in the Greek economy; actually by examining the economic, political and social evolution of the country in its early years we can easily realize that economic crisis and absence of development was the rule; rather than the exception of the rule. The structure of the paper is as follows: The first section analyzes various economic development theories, then the second section analyses the economic evolution of Greece from 1830-1950 and applies the Diamond model and the Square of Power model in order to demonstrate the structural inefficiencies of the Greek case, across time. The developments of the 1950-2013 period are analysed in the following section. Conclusions follow.

2. Theoretical framework: The New Institutional Economics Paradigm

The theories of economic development have been analyzed across time. The concept of economic development is broader to that of economic growth. "Growth" is associated with the increase of specific economic indicators (higher GNP, higher per capita income, low inflation, low unemployment, technological change); whereas "development" encompasses the above traits but also broader characteristics and social indicators (such as access to good quality services like education, health, rule of law etc). Thus for the purpose of the current intellectual exercise we shall endorse the term development.

a1. Traditional (or classical) theories of economic development.

The early (or classical) theories of development are associated with the writings of Adam Smith (1723-1790), Karl Marx (1818-1883), Emile Durkheim (1858-1917) and Max Weber (1864-1920). For Adam Smith in the *Wealth of Nations* (1776) the question of economic development is associated with the division of labor. Individuals have specific traits and skills, which if allowed exercising them; they will become skilled and productive farmers, carpenters, workers etc. Division of labor and the motivation of achieving personal interests and desires will "fuel" the market forces and the market like a *Dues ex Machina* will promote growth. Growth however will also be achieved via international trade if the countries follow the concept of absolute advantage thus produce and export the good which they can produce more efficiently.

Marx in the work *The Economic and Philosophical Manuscripts* (1844) introduces the main concept of his economic rationale. According to Marx the bourgeois aims to maximize his / hers wealth at the expense of other classes; thus by marginalizing them. According to Marx this is achieved by four ways: 1) The worker is alienated from the product of his labor, 2) The worker is alienated from the production process through the concept of specialization, 3) by following the self-interest motivation individuals are marginalized from "social needs" and purposes, 4) lives of individuals are fragmented through the social classes system. In later works like the *Contribution of the Critique to Political Economy* (1859) and *Das Kapital* a work which was fully published after Marx death he distinguishes between "use value" and "exchange value". He also introduces the concept of "socially necessary labor time". Marx points out that the bourgeois will exploit the worker by paying him less for his work compared to his product output. For Marx the exploitation system continues across time from the era of feudal society to the capitalist era and thus social struggle and technological change are key elements of developments. For Marx *real* change is associated with the complete abolition and collapse of the capitalist system and order. For Marx finally it is essential to point out that religion was the "opium of the people" thus the church ethics were an essential obstacle to change and development.

For Durkheim the transition from a traditional to a modern society is associated with a triple change. First technology changes, then individuals and their ethics and beliefs change and finally institutions change. The change of these "social facts" is the basis of change. The above facts are lined with demographic change (population growth) and urban change (development of urban areas at the expense of rural areas). These ideas are analysed in Durkheim's work *The Division of Labor* (1893).

The ideas of Durkheim are further analyzed in *The Rules of Sociological Method* (1895) and *The Elementary Forms of Religious Life* (1912). In the first work Durkheim argues that although change occurs this is taking place in an "established social world" thus the individual promotes change under a set of "given rules". In the second work Durkheim argues that religion is the symbolic representation of the society per se and if the individual defies moral rules the individual defies the society which created him, and thus destroys himself. Thus for Durkheim change and development can occur under the current social structure and order. The Marxian doctrine of achieving change and development via the complete abolition of the capitalist system is rejected. Furthermore the church ethics were considered as "society pillars", thus a force which could assist growth and development.

For Weber in his early work *The Protestant Ethic and the Spirit of Capitalism* (1904-1905) he opposes the Marxist idea about the catastrophic influence of religion and points out that in the case of the German Calvinist society religion played a very positive role for economic development. Due to the moral responsibility of one generation to the other (i.e. the parents have to assist their children) the propensity to save is increasing thus a capital is created / accumulated which fuels economic development. However, Weber's contribution is more important in his second work *Economy and Society* (1922) which was published after Weber's death. The work which is incomplete points out that there are four ideal types of social action. First action based on rational calculation, second action based on ethical beliefs, third action based on emotions and finally action based on traditions, habits and customs. These types of social action are associated with three types of institutional order. Thus Weber distinguishes between: a) Traditional authority (based on customs), b) Legal authority (based on rule of law), and c) Charismatic authority (based on individuals). For Weber there is a strong nexus between the pro-capitalist development era with the Traditional authority; whereas capitalist development is associated with the legal authority and the charismatic authority regimes.

For Weber the existence of the rule of law and of institutions which provide security, promote growth, promote social order etc are crucial for any capitalist development. Furthermore charismatic individuals (elected as leaders) will further accelerate growth and development since these leaders will co-operate with an efficient state / institutional bureaucracy apparatus. The Weberian analysis is certainly reflecting the image of "iron chancellor" Bismarck (1815-1898) and the growth of the German economy and state of the era. It also reflects the historical experience of Frederick the Great (1712-1786) and the rise of Prussia as an important political and economic power of Europe. Thus Weber's work is influenced by his own life experiences.[1]

a2. Modern Theories of economic development

Turning to more modern theories of development we distinguish four main intellectual streams of thought. These are: 1) Growth theories, 2) Modernization and post-modernization theories, 3) Neo-marxist and dependency theories, 4) Monetary Economics theory.

The early Growth theories are associated with the work of John Maynard Keynes (1883-1946) and with the works of Henry Roy Forbes Harrod (1900-1978) and Evsey David Domar (1914-1997). The core concepts of the Keynesian rationale are associated with the notions of depression, deficit finance, multiplier and full employment. In a state of depression economic growth can be achieved via government intervention which will finance various investment projects. These investments will have a multiple effect on the economy and eventually the economy will achieve growth as well as full employment. This typical doctrine is well developed in the work of *The General Theory of Employment Interest and Money* (1936).

The work of Harrod-Domar was very influential during the 1940s and 1950s. The Harrod-Domar (H-D) model differentiated between actual and warranted growth rate and pointed out that GNP growth is associated with the marginal propensity to save and with the capital-output ratio in the economy. Demographic changes were also essential. The Harrod-Domar model was criticized by Robert Solow (1924-) who in 1956 expanded the H-D model pointing out that K/L ratios are not fixed and capital has also different intensity levels.[2]

Modernization and post-modernization theories have developed three different models in order to explain development and change. The first is the "social maturation model", the second is the "differentiation-integration model" and the third is the "generating and absorbing change model". The first model analyses the shift from traditional to modern societies by expanding Durkheim's work. The second model, points out that social, political and economic developments in one society are triggered from broader global developments; thus change is "imported". The third model is a nexus of the previous two ones. A society generates and simultaneously absorbs change. The modernization theory in its pure economic dimension points out that social transformation occurs in five stages: Stage 1: Traditional society, Stage 2: Pre-conditions for change, Stage 3: Change via economic growth, Stage 4: Maturity, Stage 5: Mass consumption.[3]

The Neo-Marxist and Dependency Theories are associated with the writings of Baran (1973), Frank (1967, 1975, 1981) and Hobsbawn (1969, 2002). Baran points out that the main (dominant) market structure of capitalism is the so called "monopoly capitalism". This is obviously a very biased approach since it rejects other forms of market structure (perfect competition, oligopoly, monopolistic competition). After considering monopoly capitalism Baran continues by arguing that this creates an economic surplus (which is different from the original Marxist). Baran points out, that capitalism fails to profit from the economic surplus and practically wastes most of it. Frank in his work introduces the "centre versus periphery" analysis.

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[1] For the early theorists of development see the following: 1) A. Giddens: "Capitalism and Modern Social Theory", Cambridge University Press, 1971, 2) A. Giddens "Emile Durkheim: Selected Writings in Social Theory", Cambridge University Press, 1972, 3) S. Pollard: "The Idea of Progress", Harmondsworth, Pelican, 1971, 4) A. Sahay (ed.): "Max Weber and Modern Sociology", Routledge & Kegan Paul, 1971, 5) R.L. Heillbroner: "The Worldly Philosophers", Kritiki, Athens, 2000 (Greek edition).

[2] For growth theories see: 1) H. Jones: "An Introduction to Modern Theories of Economic Growth", London, Nelson, 1975, 2) A. Maddisson: "Economic Progress and Policy in Developing Countries", London, Allen & Unwin, 1970, especially pages 63-90, 3) R.L. Heillbroner: "The Worldly Philosophers", Kritiki, Athens, 2000 (Greek edition), especially pages 339-393.

[3] For modernization theories see: 1) A.D. Smith: "The Concept of Social Change", London, Routledge & Kegan, 1973, 2) A.D. Smith: "Social Change: Social Theory and Historical Process", London, Routledge & Kegan, 1976, 3) G. Hofstede: "Culture's Consequences: International Differences in Work-Related Values", Sage, 1980, 4) G. Hofstede: "Cultures and Organisations: Software of the mind", New York: McGraw Hill, 1991.

For Frank the centre is always the developed / former colonial western world; whereas the periphery is the underdeveloped Third World which used to be under western colonial rule. For Frank the dominant centre versus the weak periphery model continues across time. Finally Hobsbawn points out that although capitalism survived via competitive forces it still does not have a clear and overall / broad picture or vision for the future. And when a system does not know how to handle its power and what aims to achieve sooner or later it will fail probably just like the USSR (this final assertion is not formally stated but rather implied as an innuendo).[4]

An additional theoretical schema is the monetary / neo-liberal theory. This is based on the writings of Milton Friedman (1912-2006). Friedman was influenced by the monetary theory of Irwing Fisher (1867-1947). For Fisher the quantity of money is associated directly with the level of prices (inflation), assuming that the level of GNP and the velocity of money are constant. For Fisher lower interest rates will boost spending thus increase money supply and eventually prices; and vice versa. Friedman in order to explain the inflation of the 1970s followed the above rationale and pointed out that high government spending was "pumping" money in the economy; thus creating inflation. If governments controlled fiscal spending and money supply the inflation problem would be over.[5]

3b. Additional Theoretical Schemata related to economic development and growth.

There are three more streams of thought which can explain the phenomenon of economic development and growth. The first is the various theories of Foreign Direct Investment (FDI). The second is the "Diamond Model". The third schema is the theory of New Institutional Economics (NIE). We shall demonstrate that the two final schemata are more essential since they are applicable to the economics of warfare research agenda. In other words they can explain the intellectual nexus between economy and warfare.

b.1. Theories of Foreign Direct Investment and their nexus with economic growth.

The development of the subject in the last fifty years has bequeathed us with a plethora of theoretical explanations as regards the motives and determinants of FDI. At the heart of most of them lies the idea of market failure (Casson 1987), be it structural or transactional (Dunning & Rugman 1985).[6] We may find it convenient to group the various theories of FDI under the following five approaches:

The first one is the market power paradigm, stemming from the seminal work of Hymer (1960, published in 1976), which emphasises the oligopolistic and proprietary advantages, such as patents of all kinds, including technology and product differentiation features, that firms try to exploit and/or defend by undertaking FDI (Caves 1982; Cowling & Sudgen 1987; Dunning 1981, 1993; Knickerbocker 1973). As mentioned earlier, the structural failure of oligopolistic competition at home provides the national firm with the motive to exploit its proprietary advantages abroad, by engaging in international production and, thus, becoming multinational.[7]

The second approach, that of internalisation, extends the work of Coase (1937) on the nature of the firm and argues that, in much the same way that we need firms to save on transactions costs, firms become multinational to increase efficiency. This is achieved by replacing external markets through internalising various functions.

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[4] For Neo-Marxist and Dependency Theories see: 1) P. Baran: "The Political Economy of Growth", Harmondsworth, Pelican, 1973, 2) A.G. Frank: "Capitalism and Underdevelopment in Latin America", New York, Monthly Review Press, 1967, 3) A.G. Frank: "On Capitalist Underdevelopment", Oxford University Press, 1975, 4) A.G. Frank: "Crisis in the World Economy", New York, Holmes & Meier, 1981, 5) E. Hobsbawm: "Industry and Empire", Pelican, 1969, 6) E. Hobsbawm: "Interesting Times A Twentieth Century Life", Abacus, London, 2002. For a critical approach against the neo-Marxist literature see: B. Waren: "Imperialism: Pioneer of Capitalism", Verso Books, London, 1980.

[5] The most famous writings of Friedman are: 1) M. Friedman: "Capitalism and Freedom", University of Chicago Press, 1962, 2) M. Friedman & R. Friedman: "Free to Choose", London, Secker & Warburg, 1980.

[6] See: 1) M.C. Casson: "The Firm and the Market", Oxford Blackwell, 1987, 2) J. Dunning & A. Rugman: "The influence of Hymer's dissertation on the theory of foreign direct investment" in *American Economic Review* 75, 1985, pp: 228-232.

[7] See: 1) S. Hymer: "The International Operations of National Firms: a Study of Direct Foreign Investment", Cambridge, MIT Press, 1976, 2) R.E. Caves: "Multinational Enterprise and Economic Analysis", Cambridge University Press, 1982, 3) K. Cowling & R. Sudgen: "Transnational Monopoly Capitalism", Wheatsheaf, 1987, 4) J. Dunning: "International Production and the Multinational Enterprise", Allen & Unwin, London, 1981, 5) J. Dunning: "The Multinational Enterprise and the Global Economy", Addison Wesley, 1993, 6) F.T. Knickerbocker: "Oligopolistic Reaction and the Multinational Enterprise", Harvard University Press, 1973.

Firms which have already ownership advantages find it more profitable to use such advantages themselves than, say, license and/or franchise them to foreign locations. Using the market entails brokerage and contractual costs and is fraught with information and opportunistic behaviour and/or agency problems, in addition to losing out on possible tax advantages. Thus, by internalising production abroad, various costs of using the market are avoided. Consequently, the internalisation paradigm stresses that firms can save on transactions costs and raise efficiency (Buckley & Casson 1976; Rugman 1980). Under this approach, it is the transactional failure of external markets which forces firms to engage in FDI.[8]

The above two approaches lead to diametrically opposed welfare implications of the activities of multinationals. The market power paradigm implies that multinationals should be regulated to minimise the market failures they cause and, thus, their operations should be discouraged. On the other hand, the internalisation paradigm contends that multinationals are able to resolve transactional failures and to raise efficiency and, consequently, they should be encouraged (Pitelis & Sudgen 1991). In an effort to bring together the two earlier competing approaches and to provide a general explanation of FDI, in a series of publications Dunning (1981, 1988) has proposed and popularised his 'eclectic theory' or OLI (Ownership, Location, Internalisation) paradigm. The theory synthesises various strands of economic thinking, such as industrial organisation, trade, location as well as internalisation and claims that the propensity of firms to engage in international production is a function of Ownership specific advantages, Locational advantages and Internalisation opportunities.

As proposed by Dunning (1993), the basic tenets of the 'eclectic theory' are that a firm will undertake international production if: (a) it possesses certain ownership advantages, which are exclusive or firm-specific proprietary rights, such as patents; (b) it is more beneficial to the firm to use such advantages itself than lease them to foreign firms, i.e., it pays the firm to internalise its activities through international production and (c) it must be profitable for the firm to utilise these advantages in conjunction with at least some factor inputs, including natural resources, outside its home market, otherwise foreign markets can be served by exports. The 'eclectic theory' contends that all kinds of FDI can be explained by reference to its conditions. However, the OLI paradigm, in its later versions, also recognises that advantages due to ownership, location and internalisation may change over time and accepts that if country-specific characteristics are important determinants of FDI, it may be invalid to generalise from one country's experience to another.[9]

In addition to the aforementioned approaches, in a survey of theories of international production, Cantwell (1991) has also identified another two, namely, the competitive international industry approach and the macroeconomic development approach. The former, echoing Knickerbocker's oligopolistic reaction thesis, stresses that international production tends to be associated with rivalry amongst multinationals, which helps sustain the process of technological competition and development amongst them (Graham 1978, Cantwell 1989). The latter approach emphasises macroeconomic considerations, such as for example, trade and tariffs, as in the case of the Product Cycle Model (Vernon 1966, 1979); balance of payments issues (Hufbauer & Adler 1968); foreign trade and its effect on the development of the host country (Kozima 1978), who has put forward his Japanese-type, trade-oriented FDI; and the investment-development cycle (Dunning 1981, 1988), which contends that the level of inward and outward direct investment of countries is a function of their national level of development. However, as newly industrialised or industrialising countries are now undertaking outward FDI much earlier in their development, than it was the case before, Dunning's proposition may have to be qualified, than simply to extrapolate from one country's experience to another.[10]

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[8] See: 1) R. H. Coase: "The nature of the firm", in *Economica*, Vol. 4, 1937 pp: 386-405, 2) P.J. Buckley & M. Casson: "The Future of the Multinational Enterprise", MacMillan, New York, 1976, 3) A. M. Rugman: "Internalisation as a general theory of foreign direct investment: a re-appraisal of the literature", in *Weltwirschaftlishes Archive* Vol. 116, 1980, pp: 365-379.

[9] See: 1) Ch. Pitelis & R. Sudgen (eds): "The Nature of the Transnational Firm", Routledge, London, 1991, 2) J. Dunning: "International Production and the Multinational Enterprise", Allen & Unwin, London, 1981, 3) J. Dunning: "Explaining International Production", Unwin Hyman, 1988, 4) J. Dunning: "The Multinational Enterprise and the Global Economy", Addison Wesley, 1993.

[10] See: 1) J. Cantwell: "A survey of theories of international production", in the volume: Ch. Pitelis & R. Sudgen (eds): "The Nature of the Transnational Firm", Routledge, London, 1991, pp: 16-63, 2) E.M. Graham: "Transatlantic investment by multinational firms: a rivalistic phenomenon?" in *Journal of Post-Keynesian Economics*, 1, 1978, pp: 82-99, 3) J. Cantwell: "Technological Innovation and Multinational Corporations", Blackwell, Oxford, 1989, 4) R. Vernon: "International investment and international trade in the product cycle", *Quarterly Journal of Economics* Vol. 80, 1966, pp: 190-207, 5) R.

Lastly, the New International Division of Labour (NIDL) theory contends that, in response to the recession in the advanced countries in the 1980s, "production moved offshore primarily in search of low-cost, relative docile labour in the periphery" (Schoenberger 1988). But multinationals did so, having retained at home control of technology and know-how and having diffused high level skilled production activities in various developed countries, on the basis of market opportunities, local labour market conditions etc. The process of globalisation of the last twenty years has certainly been enhanced by this movement in search of cost minimisation. However, in common with most other theories, the NIDL hypothesis offers only a partial explanation of international production. While certain multinationals behave in the manner described by the theory, such behaviour is not the dominant one and, as mentioned earlier, FDI flows in the developing world are accounting for around 1/3 of the total. Also, the NIDL theory takes a narrow view of the direction of technological change, location and competition in various markets, which further restricts its applicability.[11] To make the analysis complete we have to mention, that multinationals can accelerate growth via their investments and thus FDI can have positive and negative influence on GNP, balance of payments and employment. With a cost / benefit analysis we can analyse the positive or the negative outcomes of FDI activity on these elements.[12]

b2. The Diamond Model

The Diamond Model is an attempt to analyse the success of national economies at the international level. As Porter (1990) points out: "Competitive advantage is created and sustained through a highly localized process. Differences in national economic structures, values, cultures, institutions and histories contribute profoundly to competitive success. The role of the home nation seems to be as strong as or stronger than ever. While globalization of competition might appear to make the nation less important, instead it seems to make it more so. …First firms can and do choose strategies that differ…Second successful international competitors often compete with global strategies in which trade and foreign investment are integrated…The home base is the nation …is where a firm's strategy is set and the core product and process technology…are created and maintained …The home basis will be the location of many of the most productive jobs, the core technologies and the most advanced skills…".[13] Thus the Diamond is a set of factors which can promote and sustain economic growth and development. This set comprises of the following:

A) Demand Conditions: The importance of this factor is not associated with the size of domestic demand but with the quality of demand. If domestic consumers seek low quality products in order to cover their needs; then local enterprises will produce low quality products. These products of course will not become competitive at the international level (markets).

B) Production factors: The classical (and conventional) economic theory provides an immense emphasis on production factors. Thus capital, labour,land, raw materials, technology are all important elements for the growth of the economy. However there are countries with abundant production factors; however they remain under-developed (Venezuela); on the other hand countries with limited raw materials may be extremely well developed and they may be key players in the international economy (Japan, Germany). It is obvious that the quantity of production factors alone cannot determine the success or failure of the economic development process in the long run. The quality of production factors (skilled versus unskilled labour, high quality and modern machine tools versus low quality old machine tools inside manufacturing plants etc) are more important factors for determining levels of economic development.

Vernon: "The product cycle hypothesis in the new international environment", *Oxford Bulletin of Economics and Statistics*, Vol. 41, 1979, pp: 255-267, 6) G.C. Hufbauer & F.M. Adler: "Overseas Manufacturing Investment and the Balance of Payments", US Treasury Department, 1968, 7) K. Kozima: "Direct Foreign Investment: A Japanese Model of Multinational Business Operations", Croom-Helm, 1978, 8) J. Dunning: "International Production and the Multinational Enterprise", Allen & Unwin, London, 1981, 9) J. Dunning: "Explaining International Production", Unwin Hyman, 1988.

[11] See: E. Schoenberger: "Multinational corporations and the new international division of labour: a critical appraisal", in *International Regional Science Review*, Vol. 11, 1988, pp: 105-119.

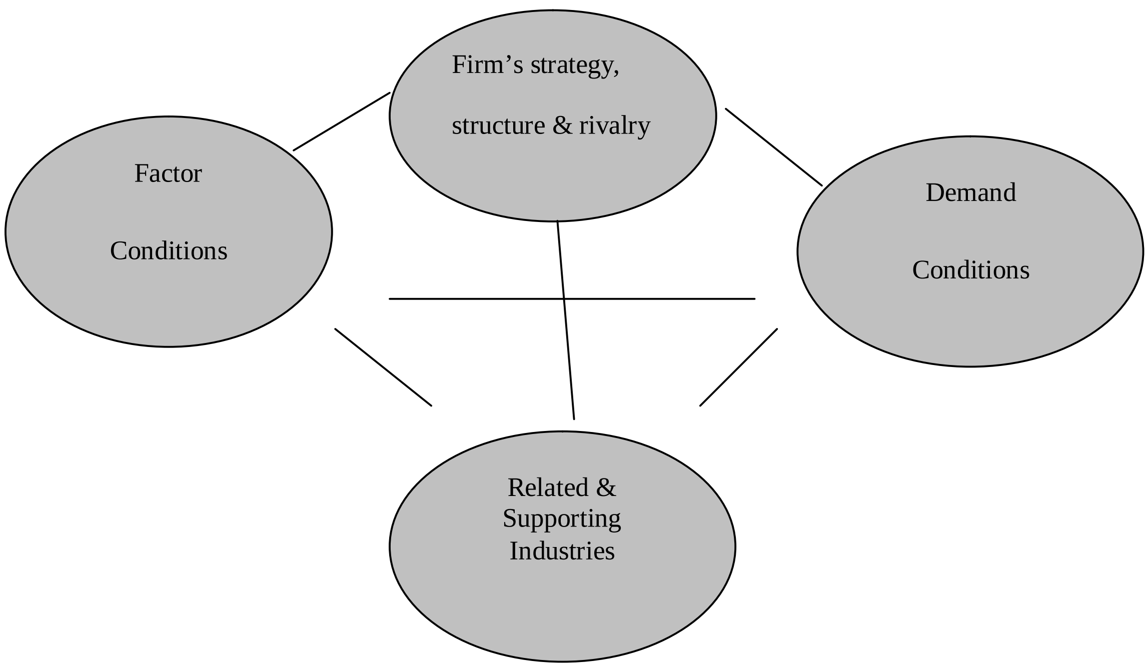
[12] See: F. R. Root: "International Trade and Investment", South Western Publishing, Ohio, 1994, pages 628-668. The nexus between development and multinational enterprises activity is immense. Due to limitations we just make reference to the following: 2) G. Jones: "Multinationals and Global Capitalism", Oxford University Press, 2005, 3) J. Dunning: "Multinational Enterprises and the Global Economy", Workingham, Addison Wesley, 1993.

[13] See: M. Porter: "The Competitive Advantage of Nations", Macmillan, London, 1990, page 19.

C) Related & Supporting Industries: In order to create and sustain in the long run, a global competitive advantage, national economies need to possess related and supporting industries. To illustrate if one country aims to possess top pharmaceutical industries it needs universities which will make high quality chemists and doctors which will contribute to the creation of high quality drugs.

D) Firm's strategy, structure and rivalry: This is a crucial element. If the level of rivalry is intensive inside the economy, the firm is forced to innovate constantly by reducing its costs and producing constantly higher quality products. Furthermore, the firm will be forced to follow an extrovert strategy emphasizing on exports and FDI. Finally the internal structure of the firm will be such that will minimize internal transaction costs. Historically the transformation of firms structures from the old Unitary form (U-form) enterprise to the multidivisional form (M-form) was associated with successes in the market (i.e. higher market share, higher profits). On the other hand firms which in the short run take advantage of government protection (via tariffs, quotas, subsidies etc) they will not be able to compete in the international markets. A schematic representation of the Diamond model is provided in Figure 1.

Figure 1: The Diamond Model.



Source: M. Porter: "The Competitive Advantage of Nations", 1990, page 72.

To sum up we point out that the Diamond model analyses the economic fundamentals and the real sphere of the economy. In the Diamond factors of production, demand, demographic dynamics, industrial development, entrepreneurial evolution (strategy, structure, competitive forces, productivity etc) are all linked and they eventually shape the economic development forces of the state. These are all co-ordinated by the government intervention which is following the "dues ex machina" doctrine; thus the state does not intervene in a socialist type way.

b3. New Institutional Economics (NIE) and the Square of Power Model.

The NIE (and the "square of power" model), provides an alternative theoretical framework for economic development.[14] According to the NIE paradigm economic development can occur only if the state mechanism functions smoothly and efficiently. Here the notion is that state bureaucracy can assist private investment and provide the safety of a social state to the general public via the vital state contributions of health, education, general infrastructure, and security.

[14] For the NIE see: 1) Niall Ferguson: "The Cash Nexus Money and Power in Modern World 1700-2000", Penguin, 2002, 2) D. North: "Institutions, Institutional Change and Economic Performance", New York, 1990.

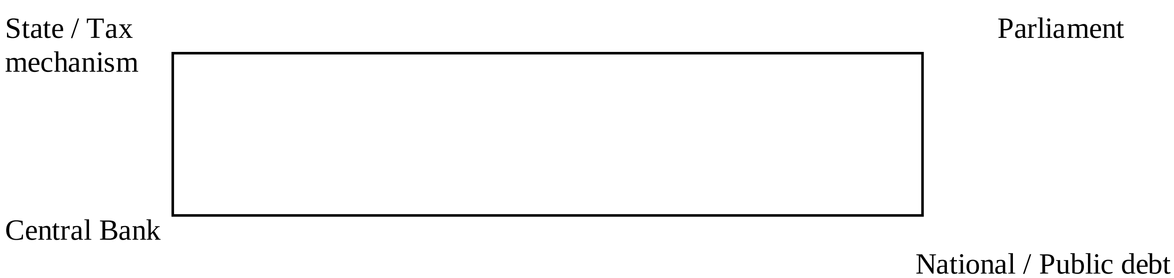
Obviously crucial to these services is the proper and efficient collection of taxes. The state can provide the above services only if the taxes are collected efficiently and used also in an efficient way; i.e. finance the best optimum government expenditures.

The role of the Parliament is also crucial. In a parliamentary democracy various political parties will win elections and rule for a certain period of time. Obviously all political parties have voters (supporters) which belong to certain social classes; and social classes have conflicting interests. The main task of the Parliament is to legislate and the crucial question according to the NIE paradigm is if the parliamentary majority will legislate in order to support exclusively the interests of its own voters or if the legislation will try to compromise conflicting social interests. In the first case, when the interests only of the voters of the specific party which won the election are satisfied, class struggle will increase since the interests of other social classes are marginalised. In this case social instability (violence, strikes, demonstrations etc.) will certainly decrease the growth rate of the economy and will also have a harmful effect on FDI. However if the opposite occurs (i.e. a social compromise via the legislation) then all social classes will be satisfied. This will create a stable social environment which will promote economic growth and FDI inflows. A typical example of social compromise from economic history is provided by the case of the Second German Reich (1871-1918). German capitalism was based on a social compromise.

The landowners (Junkers) needed the termination of cheap Russian wheat imports, in order to achieve high prices for agricultural products. The industrialists opposed the idea, since higher prices for food would mean higher salaries for industrial workers. The syndicates objected to the idea as well. Eventually the state decided to terminate Russian cheap imports; however in exchange of higher food prices the landowners accepted the development of a big German navy (a move associated with huge demand for iron and steel, thus high profits for the heavy industry). In exchange of the higher food prices, the labour movement was compensated with the creation of a welfare state (free health and education for the working class). Under this social compromise model Germany flourished.[15] The role of government legislation is also associated with property rights and the rule of law. In a parliamentary democracy property rights, protection of new ideas and patents promotes economic growth and will also affect MNEs decision to invest in the specific location.

Turning to the role of the Central Bank this is also crucial. The aim of the central bank is first to keep inflation at low level, by controlling the money supply, then it has to regulate the financial system effectively and efficiently in order to avoid banking crisis via the collapse of banking institutions and obviously act as the lender of last resort. Furthermore the central bank has to intervene in order to avoid speculative attacks on the nation's currency; thus defend the exchange rate of the local currency from speculative attacks. Finally public debt, according to the NIE has to be low (as a percentage of GNP) and furthermore long term debt (financed with low interest rates) is a more preferable option to short term debt (financed with high interest rates). If the above factors (efficient state bureaucracy, social stability via legislation, low inflation, efficient banking, stable exchange rates, low debt) exist in an economy for a long time period then this economy will grow. A schematic representation of the Square of Power model is presented in Figure 2.

Figure 2: The Square of Power



Source: N. Ferguson: "The Cash Nexus Money and Power in Modern World 1700-2000", 2002, p. 16.

To sum up the Square of Power model demonstrate the importance of the monetary sphere of the economy to economic development.

[15] See: S. Halperin: "War and Social Change in modern Europe", Cambridge 2004, pages 148-149 where there is an excellent analysis of the class struggle inside Germany and the ramifications that this struggle had on Germany's economic relations.

The state in order to achieve long term growth it has to control inflation, fiscal deficit, debt. Furthermore the state has to possess intangible assets (ability to mediate between social classes, keep social conflict at its minimum and establish mechanisms which indirectly affect development). These mechanisms are associated with investments in education, infrastructure, public health, rule of law etc. From all the above theoretical schemata, for the current purpose intellectual exercise we will endorse and apply the Square of power model.

3. The evolution of the Greek state and economy 1830-1950

The modern Greek gained its independence in February 1830 with the Treaty of London after almost a decade of revolution against the Ottoman Empire (1821-1829) which prompted the intervention of the main European Powers (Britain, France, Russia) in favor to the Greek side. From 1830 until 1913 in a period of 83 years Greece had changed its system of government three times from parliamentary rule (1830-1832) to absolute monarchy (1833-1843) and to constitutional monarchy (1844-1913). In these 83 years the state had experienced three direct foreign military interventions (1850, 1854-1857, 1897), one lost war (1897), two triumphant wars (1912, 1913), two military coups (1843, 1909), numerous political assassinations (with the most essential those of 1831 and 1905), eleven internal revolts against the state policy (between 1833-1862) and finally 85 governments were formed!. It is obvious that under this complex political and social environment the economic forces of capitalism can not develop and promote economic growth.[16]

The revolution started in March 1821 (in mainland Greece) and immediately the issue of financing became essential. In November 1821 two individuals (Theoharis Kefalas and Christos Drosinos, representatives of the Provisional Government) were send to Europe to ask for a loan of 150,000 fiorins. In exchange for the cash the Provisional Government was ready to provide deeds of land ownership to the creditors. After one year of negotiations Kefalas returned to Greece by the end of 1822 with two loans. The first was made in Zurich (Switzerland) for 40,000 fiorins and the second was made in Marseilles (France) for 62,000 fiorins, The two loans were recognized by the Greek National Assembly as “National Debt” in October 15th 1823. For his services to the state Kefalas became a general; however it was obvious that these two loans could not fully finance the needs of the war effort. Thus already from 1822 the Greek side also asked from Britain loans in order to finance the revolution. During 1822-January 1823 the vice-president of the Greek government Athanasios Kanakaris negotiated with the British side for loans but with no success. Kanakaris passed away (January 14th 1823) and was replaced by two individuals (Ioannis Orlando and Andreas Louriotis) to complete the negotiations with the British side. Finally in February 9th 1824 an agreement was signed for a loan of £800,000 with a time horizon (duration) of 36 years and 5% interest rate. However already from October 1823 a civil war had erupted inside Greece (which was terminated in July 1824). This development made issues extremely complex.

Thus due to political risk the real amount which was granted to Greece was just £472,000, since this is what investors were ready to purchase. However from that amount the British side deducted interest rate payments of two years as well as fees thus the final amount was just £280,000 and from those £10,000 were ammunition. Furthermore even this small amount was granted in monthly installments of £40,000 each. However in October 1824 a second civil war erupted in Greece which lasted until April 1826. During this period additional financing was needed. Thus a new loan (in nominal terms) of £2,000,000 was requested. Again the real amount was just £816,000. However again the British deducted interest and fees and thus the real amount was just £232,558 (from those £55,000 were ammunition). Thus although the loans of 1824-1825 period were granted from a nominal amount of £2,800,000 the actual amount that was received was just £704,558. It was obvious that the remaining cash was inadequate for the financing of the state apparatus. Domestic resources were also inadequate, since government revenue was around 4 million francs, whereas government spending was between 7-15 million francs and foreign debt was already £3 million and 15 million francs. Thus in April 8th 1827 the National Assembly requested a new loan of 5 million francs. However the three Great Powers (Britain, France and Russia) verbally declared their intention to provide a joint loan of 60 million francs. This amount however did not reach Greece.

From May 1828 until 1830 Russia provided 3.5 million rubles, and France provided another 6 million francs. Britain refused to provide any loans.

[16] Data obtained from volume: Yannis Pournaras (ed.): “Hellas”, Papyros Press, Athens 1998, pages 110-153. (in Greek).

Twice (in 1828 and in 1830), Capodistrias asked for the full amount of the 60 million francs, but again the request was rejected and the three Great Powers answered that under the circumstances they could provide loans of total 37 million francs exclusively for the re-armament and training of the new Greek army and navy.[17] Already during the 1826-1832 period a total public debt of approximately 70 million drachmae was created.[18]

After the assassination of Capodistrias in April 25th (or May 7th) 1832 the three Great Powers decided to make Greece a kingdom and offered the new throne to Otto the son of the king of Bavaria. Then the Greek side again requested the old loan of 60 million francs (or 67,008,000 drachmae). This time the Great Powers accepted the request and pointed out that the loan would be granted in full in three installments of 20 million each. The time horizon for the loan repayment would be 36 years and the interest was set to 5%. The Rothschild banking institution would provide the funds under the guarantee of the three Great Powers. This development occurred although originally the Rothschilds opposed any interference with the Greek case.[19] However, the first 20 million installment, never arrived since the 12,531,164 francs were given to the Ottoman Empire as indemnity (war reparation) for giving up additional territory to the new Greek state; and the remaining was considered as already paid during the 1828-1832 period. The second installment was also given to the Kingdom of Bavaria in order to repay a loan which Bavaria had granted to Greece of 1.8 million gulden and for army related expenditure. In March 1836 Greece defaulted on debt repayments and a new deal occurred with the Great Powers for debt repayment. Under the new deal the third installment of the 20 million francs loan was not given. Britain was committed to provide a new loan of 6.6 million francs (however the actual amount which was granted was just 1 million). Russia and France did not provide any sums and they were replaced again by Bavaria.

By 1843 total debt was nearly doubled at 150 million drachmae, and Greece defaulted for the second time.[20] Greece from 1843-1878 was totally dependent from government to government lending since the private funds (markets) did not provide any loans to the state. The severe austerity measures kept the public debt low thus total debt had a minimum increase, from 1843 to 1877, from 150 million to 186 million drachmae. Turning to public deficit throughout the 1833-1848 period the budget had deficits; however from 1850-1859 there were surpluses but these were replaced with deficits from 1860 onwards.[21]

After 1878 the Greek economy was financed again by the markets. This development skyrocketed public spending across civil service. Thus various projects mainly on infrastructure and defence were financed. These included railways, drying swamps, electricity, the Corinth canal, establishment of the State Legal Council, construction of three battleships for the Navy etc. In order to finance these projects the Trikoupis and Koumoundoros governments had to increase public lending.[22] In April 1885 a new prime minister (Deligiannis) was appointed and his primary task was to reduce the exceeding public deficit and debt. Deligiannis remained prime minister only for one year and during this time he imposed immense austerity measures. To illustrate in order to reduce government spending he decided to shut all the Greek embassies abroad (with the exception of the Greek embassy in the Ottoman empire) and he reduced salaries in the civil service and increased indirect taxes on wines and spirits as well as tobacco. One of the fiscal anecdotes of the era occurred with the…cat of the Ministry of Finance. In the Ministry there was a cat which was part of the Ministries budget. The Ministry was spending 5 drachmae in order to pay for the food of the cat which was necessary for the Ministry.

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[17] See: N. Soilentakis: "Unfortunately we are bankrupt The defaults of 1827, 1893, 1932", Papazisis editions, Athens, 2012, pages: 54-57.

[18] See: G.B. Dertilis: "History of the Greek State 1830-1920", Estia publications, Athens, 2006, Volume I, page 126. (in Greek), calculated in drachmae not phoenixes.

[19] See: Niall Ferguson: "The World's Banker. The History of the House of Rothschild", Weidenfeld & Nicolson, London, 1998, page 282.

[20] See: G.B. Dertilis: "History of the Greek State 1830-1920", Estia publications, Athens, 2006, Volume I, pages 117-127. (in Greek). An additional excellent source on Greek fiscal historical evolution is the book by Tasos Minas Iliadakis: "Foreign lending in genesis and evolution of modern Greek state 1824-2009", Batsioulas publications, Athens, 2011 (in Greek).

[21] See: G.B. Dertilis: "History of the Greek State 1830-1920", Estia publications, Athens, 2006, Volume I, pages 117-127, 284, 289-352. (in Greek).

[22] The railway network increased from 9 km in 1869 to 906 km in 1892 and 1,573 km in 1911. See: G.B. Dertilis: "History of the Greek State 1830-1920", Estia publications, Athens, 2006, Volume II, page 676. (in Greek). For the electricity see: N. Pantelakis: "The electrification of Greece. From private initiative to state monopoly 1889-1956", National Bank of Greece Cultural Foundation editions, Athens, 1991.

The cat was chasing the rats which were eating the paper files of the Ministry of Finance. Deligiannis ordered to stop the five drachmae cat food expenditure exclaiming that: “if the cat is doing her work properly she does not need the food [since she eats rats], if the cat does not do her work properly, we do not need her”. By 1893 total public debt was increased to 1,160 million drachmae. Foreign debt was 643 million gold francs and represented around 150% of Greece’s GNP. The domestic debt was also 211 million drachmae; Greece defaulted once again.[23]

Political developments continued to influence economic policy. A brief Greek-Turkish war (April-May 1897) ended with Greek defeat. The outcome was the imposition of an initial war reparation payment from Greece to the Ottoman Empire of 95 million gold francs which was later reduced to 4 million Turkish lire. (TL). Under the circumstances a new restructuring of the Greek debt was needed. An “International Financial Commission” (IFC), was established in Athens by the Great Powers in April 1898. The IFC took control of all government revenues from state monopolies (tobacco & cigarettes, wines & spirits, salt, oil, lucky games), in the port of Piraeus. The IFC could also confiscate the tariff revenues from the ports of Lavrion, Patras, Volos and Corfu. A new loan of 170 million gold francs with 2.5% interest was also given by the Great Powers (from that the 150 million were granted instantly). The time horizon of the loan was 60 years after 1903.

Between 1902-1912, the Greek governments had to finance immense military related activities and also immense public investment projects. Defense expenditure between 1898-1911 was 518.7 million drachmae. Furthermore the state had to finance public investment projects (railways) and repay old debts. In order to finance these needs the state made three more loans. The first one was in 1902 for 56,250,000 francs, which was used fully for the development of the railway network. A second loan for 20 million francs was made in 1907 exclusively for defense purposes. A third loan of 110 million francs followed in 1911 mainly for the repayment of previous loans and for the financing of current fiscal affairs. However the Balkan wars of 1912-1913 skyrocketed defense spending as well as the debt. Thus in 1913 debt increased to 1,216 million drachmae and in 1914 it was 1,424 million drachmae. Of course due to the victorious outcome of the wars both markets and states were willing to provide funding to the state.[24]

However it was not just the fiscal side of the economy problematic. Turning to human capital a driving force of economic development, throughout the second industrial revolution, the situation was also dramatic. In 1870 from a total population of 1,450,802 inhabitants the 1,192,599 were illiterate (or 82.20%). In 1907 from a total population of 2,631,952 inhabitants the 1,744,137 were illiterate (or 66.27%). Although illiteracy was reduced it still remained high and continued to be an obstacle to economic development.[25]

Turning to industry and agriculture the picture was similar. In industry in 1867 there were just 22 factories in Greece (all of them in Athens). By 1909 the total number of factories had increased to 355 (the 243 of them in Athens). Although the number demonstrates a respectable increase in terms of HP of the industry the figures were just 300 HP in 1867 and 9,000 HP in 1900. For reasons of comparison we point out that during the 1876-1880 period, in Spain the figure for the industry was 470,000 HP. Thus twenty years before 1900 the Spanish industry was 52 times bigger when compared to the Greek industry.[26]

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[23] See: Tasos Minas Iliadakis: “Foreign lending in genesis and evolution of modern Greek state 1824-2009”, Batsioulas publications, Athens, 2011, pages: 61-65.

[24] See: 1) G.B. Dertilis: “History of the Greek State 1830-1920”, Estia publications, Athens, 2006, Volume I page 30 and Volume II, page 1047. (in Greek), 2) N. Soilentakis: “Unfortunately we are bankrupt The defaults of 1827, 1893, 1932”, Papazisis editions, Athens, 2012, pages: 83-122, 3) Tasos Minas Iliadakis: “Foreign lending in genesis and evolution of modern Greek state 1824-2009”, Batsioulas publications, Athens, 2011, pages: 41-131.

[25] See: G.B. Dertilis: “History of the Greek State 1830-1920”, Estia publications, Athens, 2006, Volume II, page 973. (in Greek). For reasons of comparison we provide various illiterate figures during the pre-1914 era for various European states. In 1903 in France illiteracy rate was just 4%, whereas in Serbia it was 55.92%. In 1904 in Britain illiteracy was 1%, in Holland it was 2.10%, in Switzerland was 0.09% and in Romania it was 69%. In 1912 in Germany it was 0.01%. In 1913 in Belgium the figure was 7.87%, whereas in Russia in 1895 it was 61.10%. See: Christos Nerantzis: “The Epos of Asia Minor 1919-1922”, Volume II, Morfotikos Kosmos publications, Athens, 1987, page 250.

[26] See: G.B. Dertilis: “History of the Greek State 1830-1920”, Estia publications, Athens, 2006, Volume II, pages 598-600. (in Greek).

Banking and shipping were the two main services which were rather successful. To illustrate, bank deposits in 1850 (only in the "National Bank of Greece") were 3,500,000 drachmae; however by 1912 total bank deposits were 421,600,000 drachmae (in constant 1914 prices). The financial sector has been boosted by the entry of Greece in the Latin Monetary Union in 1867 and from the establishment of the Athens Stock Exchange in September 1876.[27] In the case of shipping although the number of ships (steamers, ketches etc) has remained constant (a small increase from 1,135 in 1875 to 1,149 in 1912), the tonnage increases immensely from 218,320 tons to 540,122 tons respectively.[28]

In the case of foreign direct investments (FDI) the ability of the state to attract foreign multinationals was limited.[29] During the 1870-1900 period a number of foreign multinationals entered in order to profit from the massive state investment in various infrastructure projects. The total figure of FDI inflows during the 1850-1913 period is unknown and only limited information is provided in the records. By 1896 total FDI was estimated between 24-30 million drachmae.[30]

The 1914-1950 sub-period: Political and economic developments

The eruption of the First World War in the summer of 1914 has changed the political situation in Europe. The Greek Prime Minister insisted that Greece should support the British and the French. However the King objected to this option insisting that Greece should remain neutral. The outcome of this dispute was an immense political crisis, with devastating economic ramifications. In October 1915 French and British troops with Greek consent landed in Thessalonika and by December French and British forces landed in the islands of the Aegean. One month later (January 1916) they also occupied Corfu island, in the Ionian Sea. The landing of allied armies triggered a German response. In May 1916 German and Bulgarian forces invaded Greek territory. Greece aim to remain neutral was not respected by both sides. Both sides the Central Powers and the Entente had violated and occupied parts of a neutral state. In October 1916 Greece formally will be divided in two Greek states. The "state of Athens" will remain neutral; whereas the "state of Thessalonika" under Venizelos who has formed a provisional government will enter the war against the Central Powers. From October 1916 until June 1917 the state of Athens (i.e. south of Greece) will be under the naval blockade of the Entente and at that time French forces will invade Athens and force a regime change. Venizelos will form again a government and King Constantine was forced to abdicate and pass the throne to his son Alexander. Then from June 1917 until the end of the war (November 1918) the Greek army will fight the Bulgarian and German forces in the Macedonian front. These developments for the economy were catastrophic.

Examining the economy of the "state of Athens" (south Greece) the first major problem was caused by the allied naval blockade. The blockade was extremely harmful since it blocked all trade on which Greece had to rely on. Vital consumer commodities as well as food and medicines in order to survive were imported and from 1915 onwards these vital imports seized. As Zavitzianos (1946) describes in his memoirs: "wheat was not enough and was mainly in the villages not in big towns, coal was in complete absence, the shortage the deprivation was unimaginable…there was no bread…when a rumor was spread that the allies will terminate the blockade in the seaside hungry and curious people were gathering in order to see if bread has arrived…".[31]

[27] For the developments of the financial sector see the following: 1) G.B. Derilis: "The Issue of Banks 1871-1878", National Bank of Greece Cultural Foundation editions, Athens, 1989 (in Greek), 2) A. Vaxevanoglou: "The Greek Capitalists 1900-1940", Themelio editions, Athens 1994 (in Greek), 3) I. Kokkinakis: "Currency and policy in Greece 1830-1910", Alexandria publications, 1999 (in Greek), 4) L. Tsoulfidis: "Economic History of Greece", University of Macedonia publications, Thessalonika, 2003, 5) G.B. Dertilis: "History of the Greek State 1830-1920", Estia publications, Athens, 2006, Volume II, pages 1,020-1,040. (in Greek). For the Latin Monetary Union see: John Chown: "A History of Monetary Unions", Routledge 2003, pages 57-63.

[28] See: L. Tsoulfidis: "Economic History of Greece", University of Macedonia publications, Thessalonika, 2003, page 218 (in Greek).

[29] We point out that we refer to real investments from MNEs and not financial / portfolio investments.

[30] See: G.B. Dertilis: "History of the Greek State 1830-1920", Estia publications, Athens, 2006, Volume II, pages 635-647 and N. Pantelakis: "The electrification of Greece. From private initiative to state monopoly 1889-1956", National Bank of Greece Cultural Foundation editions, Athens, 1991, pages 66-121.

[31] See: K. Zavitzianos: "My memoirs of the historical dispute between King Constantine and Eleftherios Venizelos as I lived it", Volume I, Rodis printing, Athens, 1946, page 237. (in Greek). At this point we have to make an essential remark. The province of Thessaly which was part of the state of Athens was the main wheat producer region of Greece. However

In February 1916 after constant Greek protests the Entente Powers allowed a monthly entry of 1,270 tons of wheat, 17,000 sacks of rice and 25,000 tons of coal for all Greece. These amounts however did not cover domestic needs and were not always delivered.[32] However fiscal policy was an additional problem. As Markezinis (1966) points out: "In 1911 government revenue was 142,519,218 drachmae and government spending was 130,638,154 drachmae; thus a surplus occurred…In 1914 government revenue was 567,147,742 drachmae and government spending was 555,260,269 drachmae…thus again a surplus of 11,887,473 drachmae occurred".[33] However by 1916 the picture had changed. As Oikonomou (1972) points out: "The daily expenditure for the army mobilization was 900,000 drachmae and thus the fiscal year of 1916 ended with a deficit of 380 million drachmae. …In order to finance this deficit, loans from abroad were required. The Entente Powers provided zero funds. The US was ignoring …the only solution were domestic loans…".[34] Practically the excess money supply would trigger inflation.[35] At this point we have to stress that the governments of the state of Athens had acquired some loans from the Central Powers. Although the nominal amount of these loans was 80 million marks after the re-unification of Greece the new government insisted that the actual amount was less than 72 million. These funds however were inadequate to finance the state needs, since only the military expenditure of the 1914-1916 period was 757,228,640 drachmae.[36]

Turning to the "state of Thessalonika" economic problems existed there as well. The first one was associated with the naval blockade. Venizelos insisted that the monthly imported quantities of food and coal which the Entente allowed for Greece should all be channeled to the north; the Thessalonika state, depriving the south from all available quantities. Obviously for the Provisional Government the issue of armaments was equally important. From October 1916 to January 24th 1917 the Provisional Government asked from the British and the French the amount of 60 million drachmae as the minimum sum in order to mobilize an army of 60,000 men against the Bulgarian-German forces in the Macedonian front. However until March 1917 the British had provided 3 million, the French another 4 million; thus the force of 60,000 men could not be mobilized. In March 16th 1917 the Allies decided to accept the demand of the Provisional Government; however they changed their mind three days later and finally a deal was announced in April 5th 1917. This made possible the mobilization of the 60,000 men force only in April 18th 1917. In the period October 1916-June 1917 the combined initial decision of the British and the French was to provide to the "state of Thessalonika" the amount of 33,349,129.62 drachmae. However the French provided only 15,936,625 drachmae and the British just 10,000,000 drachmae; thus leaving a deficit of 7,412,504.62 drachmae to the Provisional Government.[37]

However the financing of the war effort was not the only problem. Although the country was divided between north and south the drachmae remained a single currency, acceptable across the borders of the two states. The National Bank of Greece with its headquarters based in Athens terminated currency deliveries to the north and the islands when the Provisional Government was formed in Thessalonika. This undermined transactions in the north. In order to face the problem the Provisional Government asked -from the London based headquarters of the Ionian Bank - in the middle of December 1916 to print money and send it to the north.

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domestic production of 126,000 tons was adequate to feed the population of the Athens and Thessalonika states for a period of four months. Thus imports were vital for both governments. The Provisional government of Thessalonika was pressing the Entente Powers to occupy the province of Thessaly and thus deprive the Athens state from the wheat. See: N. Petsalis-Diomidis: "Greece of two governments 1916-1917", Filippottis editions, Athens, 1988, pages 67-82.

[32] The economic ramifications of the naval blockade are well analyzed in A. Oikonomou: "Petros Protopapadakis 1859-1922 The man and his era", Athens, Fragoulis press, 1972, pages 230-232, 277-280.

[33] See: Sp. Markezinis: "Political History of Modern Greece 1828-1964", Volume III, Papyros Press, Athens, 1966, page 246 (in Greek).

[34] See: A. Oikonomou: "Petros Protopapadakis 1859-1922 The man and his era", Athens, Fragoulis press, 1972, pages 235-236.

[35] The inflation figures were as follows: 1914=100, 1915=121, 1916=167, 1917=289, 1918=389. To illustrate the daily income of an unskilled worker in 1917 was 4.2 drachmae; when a pair of shoes cost 55 drachmae and an ounce of bread cost 1 drachma. See: B. Tsihlis: "The Asia Minor campaign and the compulsory loan", Novoli publications, Athens, 2010, pages 125-126. (in Greek).

[36] See: K. Zavitzianos: "My memoirs of the historical dispute between King Constantine and Eleftherios Venizelos as I lived it", Volume I, Rodis printing, Athens, 1946, pages 128-129 and St. Stefanou (ed.): "Texts of Elefterios Venizelos", Volume II, edited by the Liberals Club, Athens 1982, pages 321-324 (Parliamentary Records August 3rd 1917). See also: I.D. Salavrakos: "Economy and Total War: The case of World War I", Volume I, Kritiki publications, Athens, 2007, page 265 (in Greek) and B. Tsihlis: "The Asia Minor campaign and the compulsory loan", Novoli publications, Athens, 2010, page 124.

[37] See: N. Petsalis-Diomidis: "Greece of two governments 1916-1917", Filippottis editions, Athens, 1988, pages 83-117. (in Greek).

One month later on January 31st 1917 the Ionian Bank replied to the Provisional Government that printing of new money was possible only if the bank had the approval of the British and the French monetary authorities. However on February 26th 1917 the British and the French prohibited any printing by the Ionian bank. If the British and the French were to back the printing of new drachmae they requested that this new drachmae would be devalued at least 12% against the pound or the FF. Obviously, this would trigger inflation in the state of Thessalonika; thus the Provisional Government rejected the idea. After this development the Provisional Government decided to blackmail the National Bank of Greece. They send a message stating that if the National Bank of Greece did not send to its Thessalonika branch the amount of 50 million drachmae which could be used for transactions in northern Greece the Ionian bank would start printing money. Obviously it was a bluff. This however worked. By April 3rd 1917 the first 15 million arrived and by the end of the month the issue currency circulation was resolved.[38]

However even after the re-unification of the country the economy suffered from the war. In order to finance the war effort during June 1917-November 1918 period the once again unified Greek state had to spend on military the astonishing amount of 1,982,896,650 drachmae (£ 79,315,866).[39] On top of this sum one has to add the fiscal cost of damages from both the Allies and the Central Powers. The damages, which the Entente Powers caused to the Greek economy during the occupation of Northern Greece and the islands has been estimated to 1,126 million drachmae. On the other hand the damages, which the Central Powers had caused was calculated, at the level of 5,000 million drachmae.[40] In 1920 Spa conference, the Allies realized the damages and decided that Greece was entitled to receive from Germany the amount of 2,327,200,000 marks as war reparations; however by 1928 Germany had paid 3,8 million marks in cash and 33,5 million marks in various products. Furthermore Bulgaria was to pay £90 million; but the Allies reduced the amount later to just £20 million.[41]

The end of the Great War (November 11th 1918) found Greece psychologically divided between the Liberals (of Venizelos) and the right wing monarchists (of former King Constantine) and with immense economic problems. The psychological division paralyzed the society and the state apparatus. The economic problems made the paralysis even bigger. Before the termination of the war (February 1918) Greece had made three new loans with Britain, France and the USA. The amount of these three loans was 750 million drachmae and later an additional loan of 100 million drachmae was made between Greece, Britain and France. However until the November 1920 elections when the Liberals of Venizelos were ousted from power and the right wing Popular Party won and formed a government the British had provided only 50% of the loan (from a total of £12 million), the US had provided the 66% of their sum (from a total of $48 million) and France had given nothing. Article 4 of the loan agreement between Greece and the three states had stipulated that if the three Powers did not provide the funding to Greece; the country was not able to ask for loans from any private banking consortium; in other words the intergovernmental loans were associated with the economic (fiscal) control of Greece.

However the country from May 1919 was again in a state of war with Turkey. This war -known as the Asia Minor campaign- lasted until August 1922 when the Greek army was defeated and retreated to Greece. The war formally ended in 1923 with the Treaty of Lausanne between Greece and Turkey. One reason of Greek defeat in the 1919-1922 war, was associated with limited military spending. To illustrate the soldiers which landed in May 1919 in Smyrna were unpaid from December 1918 or January 1919![42] Since the Allies did not provide in full the loans of February 1918 the Venizelos government in order to finance the war had to rely on domestic resources. Thus between September 1919-November 1920 the government issued bonds of 1,300,000,000 drachmae. Furthermore an additional sum of 300 million drachmae was razed through state lottery. Total internal lending was 1.6 billion drachmae and the 1 billion came from the "National Bank of Greece" who simply expanded its monetary supply by 700 m. drachmae and causing inflation.[43] When the new government was elected in November 1920 the Allies officially suspended all payments from the February 1918 loans to Greece.

[38] See: N. Petsalis-Diomidis: "Greece of two governments 1916-1917", Filippottis editions, Athens, 1988, pages 119-127.
[39] See: I.D. Salavrakos: "Economy and Total War: The case of World War I", Volume I, Kritiki publications, Athens, 2007, page 266.
[40] See: B. Tsihlis: "The Asia Minor campaign and the compulsory loan", Novoli publications, Athens, 2010, page 128. (in Greek).
[41] See: I.D. Salavrakos: "Economy and Total War: The case of World War I", Volume I, Kritiki publications, Athens, 2007, page 266.
[42] See: "Replenishment and transportation during the Asia-Minor Campaign 1919-1922", published by the Hellenic Army History Department, Athens, 1965 (reprint 1993), pages 64-68.
[43] See: 1) "Epitome History of the Asia-Minor Campaign 1919-1922", published by the Hellenic Army History Department, Athens 2001, pages 396-397, 2) "The Trial of the Six Official Proceedings", Athens 1976, pages 515-517.

During the November 1920 – February 1921 the daily cost of the Asia Minor Army was exceeding the amount of 3 million drachmae.[44] Since the Allies had terminated the funding of Greece the minister of Finance Protopapadakis suggested in March 1921 the termination of payments of Greek foreign debt. At that time annual foreign debt repayments were absorbing the astonishing amount of 3.5 million gold sterlings (£). Protopapadakis pointed out that similar decisions, were taken by Serbia and Rumania in 1918 as well as Bulgaria in 1921, however other ministers objected to this policy option under the fear of British and French reaction.[45]

Since this option was not endorsed on April 6th 1921 the government decided to finance the war with excess money supply of 500 million drachmae. On July 1st 1921 the Greek state made three more loans with the National Bank of Greece. The first was for 40 million FF, the second was for 125 million drachmae and the third was for 150 million drachmae. All loans had a 6% interest rate. Until September 1921, when the biggest battle of the war ended all the resources from the April 500 million drachmae and all the resources of the 150 million of the July loan were used.[46] After the end of September campaign the war was to continue for another eleven months. The requests of the army were immense. Only in November 1921 for that month alone the army requested new equipment worth of 110 million drachmae. This amount was not available in the Ministry of Finance.[47]

In order to continue to finance the war Greece had to convince the Great Powers to revoke their policy and start to finance Greece again. The Greek Prime Minister Gounaris started a tour across major European capitals in order to ask for funding. He was successful only in Great Britain. On December 22nd 1921 an agreement was reached between Britain and Greece. It was decided that Britain would not provide the remaining sum of £5.5 million from the 1918-1919 loans, but a new credit of £15 million would be granted to Greece. However France and the US continued to impose an embargo on payments. The new British loan was equal to 412.5 million drachmae; a sum, which cover immediate needs.[48]

The tragic year of 1922 followed. The budget which the government proposed for that year had a provision of total revenue of 1,719 million drachmae and total expenditure of 3,397 million drachmae; thus a deficit of 1,678 million was expected. Tactical military spending for both the army and the navy was 526 million; however the total war related expenses were 1,712 million drachmae.

In order to cover this immense deficit the government increased taxation aiming extra revenues of 685 million and has made a new measure which has been unique in global economic history. The currency was literally dichotomized. Every Greek banknote was issued by the National Bank of Greece. In the face of its banknote was on the one corner the picture of the first Governor of the Bank (George Stavros) and on the other corner was the Crown. According to the new law the citizens had to keep the half of the currency (with the corner of Stavros) and give the other half (with the crown) to the government. The half with the crown was immediately becoming a bond i. e. the state borrowed money from the citizens (50 drachmae) and was promising to repay them in a later stage with 53 or 55 drachmas. The Law for the currency dichotomy was introduced in the Parliament in March 23rd 1922 and by March 25th was a law. When in that first day (March 23rd) the public was informed by the media immense deposit withdraws occurred from the banks. From the National Bank of Greece 10 million drachmae were immediately withdrawn. From the Popular Bank 2 million, from the Ionian Bank another two million, from the Bank of Athens another 5 million, from the Industrial Bank 800,000.

In the first day around 30 million of deposits were withdrawn. According to the press of the time, the Athenian market observed an immense consumption boom; since people were buying all types of goods (food, medicine, clothes etc) simply because they wanted to liquidate their cash for goods. During that day the price of shoes alone increased by 30% and in some cases even by 60%.[49] However, after the initial panic speculation followed. The public realized that by giving half of the currency to the government this would be a bond and in the future the crown half of the currency would be exchanged for a bigger face value. Thus if people were hiding some crown half currency and handed them to the government in a later stage (after one month) the return would be higher.

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[44] See: A. Oikonomou: “Petros Protopapadakis 1859-1922 The man and his era”, Athens, Fragoulis press, 1972, pages 382-383.
[45] See: A. Oikonomou: “Petros Protopapadakis 1859-1922 The man and his era”, Athens, Fragoulis press, 1972, page 406.
[46] See: A. Oikonomou: “Petros Protopapadakis 1859-1922 The man and his era”, Athens, Fragoulis press, 1972, pages 408 and 434.
[47] See: A. Oikonomou: “Petros Protopapadakis 1859-1922 The man and his era”, Athens, Fragoulis press, 1972, pages 435-436.
[48] See: A. Oikonomou: “Petros Protopapadakis 1859-1922 The man and his era”, Athens, Fragoulis press, 1972, pages 518-519.
[49] See: B. Tsihlis: “The Asia Minor campaign and the compulsory loan”, Novoli publications, Athens, 2010, pages 168-170.

Thus immediately after the initial panic traders started to buy the crown half from the public at a higher face value of 2 or 3 drachmas more; assuming that they would give them to the government for higher return. The expectation from the Finance Ministry was to gather by this process the amount of 1,600 million drachmae. However the money in circulation at that time were 3,100,141,090 drachmae thus the state calculated that the inflow would be 1,550,070,545 drachmae. The actual inflow to the state treasury was slightly lower at around 1,300 million (the actual amount was 1,288,470,545 drachmae).[50] However the dichotomy was a de facto default. To sum up during the March 1st 1921-May 8th 1922 period total state revenues were 2,270,500,000,000 drachmae. Furthermore in those last months of the war the state had a reserve of 1,255,000,000 drachmae due to the currency dichotomy.[51] Turning to inflation this has been skyrocketed. To illustrate, the evolution of price increases was as follows: 1914=100, 1919=342, 1920=359, 1921=421, 1922=737, 1923=1,213.[52] The drachma was further depreciated (£1=97 drachmae in February 1922).[53]

It was obvious that under these circumstances the military defeat was inevitable. The reality was more difficult since the Turkish side enjoyed the privilege of military and economic assistance by three states USSR, France and Italy.[54] Eventually Turkish forces defeated the Greek army and entered Smyrna in August / September 1922. The immediate outcome was a direct military rebellion in September 1922 against the government and the establishment of a military court tribunal which imposed death penalty on six figures of the Greek political and military elite (The trial of the Six). The formal peace was conducted in Lausanne in July 1923. In Asia Minor they were living 1.5-3 million Greeks at that time. From those almost 400,000-650,000 were killed and the rest had to abandon their properties and start a new life in Greece. Only in the town of Smyrna the fire had made material losses of $200 million.[55] Throughout the July 1914-January 1924 period Greece had 22 governments (excluding the provisional governments of Thessalonica during the 1915-1917 period). The country had seen another army intervention in politics (in September 1922) and of course the military intervention of all major European powers during the First World War.

During the period January 1924-June 1941 when Greece was occupied by the Axis countries (Germany, Italy, Bulgaria) in the Second World War, the political and institutional instability remained.[56] During this period the country had experienced 26 governments. Some of them however were not democratically elected. Thus the country experienced one military intervention in October 1923, two successful military dictatorships. The first was in June 1925-July 1926 and the second was in August 1926. Another unsuccessful military coup d' etat, occurred in March 1935, and then a successful military coup occurred in October-November 1935. This however did not last long and democratic elected governments followed. However in August 1936 a new dictatorship was imposed. The difference was that the coup of 1935 was made by the liberal army officers; whereas the dictatorship which was established in August 1936 was made by the right-wing officers. Furthermore the country observed a regime change from constitutional monarchy to presidential democracy in April 1924. However Greece became again a kingdom in November 1935.

Thus in a period of 17 years Greece was transformed from constitutional monarchy to presidential democracy and constitutional monarchy again. Furthermore although a constitution was in place practically this was violated since the country experienced seven military interventions (October 1923, June 1925, April 1926, August 1926, March-April 1933, March 1935, August 1936). From those seven five were brief but two were dictatorships (June 1925-July 1926 the Pangalos dictatorship and the 1936-1941 Metaxas dictatorship).

[50] See: B. Tsihlis: "The Asia Minor campaign and the compulsory loan", Novoli publications, Athens, 2010, pages 160-161, 168-169, 275-276.
[51] See: "The Trial of the Six Official Proceedings", Athens 1976, pages 511-513.
[52] See: Sp. Markezinis: "Political History of Modern Greece", Volume I (Period 1920-1922), Papyros Press, Athens, 1973, page 280.
[53] See: Sp. Markezinis: "Political History of Modern Greece", Volume I (Period 1920-1922), Papyros Press, Athens, 1973, page 282.
[54] Although the issue is well analyzed it goes beyond the scope of the current research.
[55] See: G. Christopoulos & I. Bastias (eds.): "History of the Greek Nation", Volume 15, Ekdotiki Athinon publishers, Athens, 1978, pages 246-247. (in Greek).
[56] Greece entered the Second World War in October 1940 when Italy invaded the country. However the Italian attack was repelled and that forced Germany to intervene in April 1941. Greece was occupied by the May 31st 1941 when Crete fell to the Germans.

During this period the country observed another foreign intervention (in August 1923 when Italy occupied the island of Corfu). Under this chaotic political framework economic developments were paradoxically extremely good. The immediate problem of the Greek economy in 1923 was the immense challenge to accommodate 1.3 million refugees from Asia Minor. The economic developments of the 1923-1929 period were mixed since the inflow of 1.3 million Greeks from Asia Minor would drastically change the labour force and market. Most of the Greeks of Asia Minor were skilled workers and entrepreneurs and thus they would contribute to the economy immensely with their skills. However in order to accommodate the refugees Greece needed again access to foreign loans. Thus in 1924 a loan of £12.3 million was granted to Greece from Britain. Due to the land reform of 1924 and the inflow of workers agricultural production during the 1923-1929 period increased. To illustrate the production of wheat increased from 239,000 metric tons in 1923 to 311,000 in 1929. Rye production increased from 16,000 metric tons to 34,000 metric tons over the same period. Finally maize increased from 162,000 metric tons in 1923 to 178,000 in 1929.[57] Turning to industry the value of industrial production increased from 3.1 billion drachmae in 1923 to 7.1 billion in 1929. The number of industrial workers increased from 154,600 in 1920 to 280,331 in 1930. However the 93% of industrial labour force was still in small family labour oriented enterprises which had a total number of 1-5 workers.[58]

Turning to banking the developments were also positive. Between, 1830-1921 years, a total number of 41 banking institutions were established in Greece. However, in just ten years, (1921-1931) 40 new banks were established and 4 foreign banks opened branches and two credit institutions. Also the "big four" (National Bank of Greece, Bank of Athens, Bank of Anatolia, Commercial Bank) started to operate branches abroad. The monetary banking reform was immense. In 1927 the League of Nations asked from Greece to establish a central bank. In July 1929 a new bank was established the Agricultural Bank of Greece.[59] Bank deposits these were increased from 5,122 million drachmae in 1923 to 13,355.8 million in 1929 at current prices (or from 433 million to 694.5 million at constant 1928 prices).[60] The reserves of the Bank of Greece (in gold and foreign currency) increased from $48 million in 1927 to $55 million in 1928.[61] The number of enterprises listed in the Athens Stock Exchange increased from 20 in 1906 to 30 in 1915, 40 in 1920 and 95 in 1930.[62]

In transportation the picture was as follows: In shipping the number of steam ships increased from 437 in 1924 to 559 in 1930; whereas the number of sail ships decreased from 1,018 to 708 over the same period. In terms of tonnage this was increased from 943,000 tons to 1,469,000 tons.[63] In railways the network increased from 2,463 km in 1923 to 2,679 km in 1929 and the freight traffic increased from 115 units to 182 units between 1924 and 1929.[64] However public debt continued to increase. To illustrate public debt in 1924-25 was 227,807,957 drachmae and by 1928-29 was 1,563,480,937 drachmae. The positive developments of the 1924-1929 period were partially terminated by the international crash of 1929. The crisis did not have a harmful effect on Greek agriculture nor industry.

To illustrate in the case of the primary sector various agricultural products like tobacco, currant, were mainly exported to international markets. However the exports of agricultural commodities collapsed after 1929; which had harmful effects on the primary sector. However agricultural production observed healthy increases. Wheat production increased from 311,000 metric tons in 1929 to 980,000 tons in 1938. Barley production increased from 104,000 tons to 221,000 in the same period. Rye increased from 34,000 tons to 58,000 tons in the same period. Potato production increased from 35,000 metric tons to 187,000 in 1939.[65] Although the export markets collapsed the increase of agricultural production can be associated with domestic demand for food products.

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[57] See: B.R. Mitchell: "International Historical Statistics Europe 1750-2000", Palgrave, fifth edition, Macmillan 2003, page 281.
[58] See: G. Christopoulos & I. Bastias (eds.): "History of the Greek Nation", Volume 15, Ekdotiki Athinon publishers, Athens, 1978, pages 338-339.
[59] See: Andreas Kyrkilitsis: "The Banks in Greece", Athens 1934.
[60] See: K. Kostis: "Banks and savings 1910-1940", in the volume: K. Bourazelis & Ch. Meidani (eds.): "Savings and Money management in Greek History", Postal Bank editions, Athens, 2001, pages 583-603. (in Greek).
[61] See: L. Tloulfidis: "Economic History of Greece", University of Macedonia publications, Thessalonika, 2003, page 246.
[62] See: A. Vaxevanoglou: "The Greek Capitalists 1900-1940", Themelio editions, Athens 1994, p. 84.
[63] See: B.R. Mitchell: "International Historical Statistics Europe 1750-2000", Palgrave, fifth edition, Macmillan 2003, page 717.
[64] See: B.R. Mitchell: "International Historical Statistics Europe 1750-2000", Palgrave, fifth edition, Macmillan 2003, pages 676 and 688.
[65] See: B.R. Mitchell: "International Historical Statistics Europe 1750-2000", Palgrave, fifth edition, Macmillan 2003, page 281.

The secondary sector continued its increase. Practically as Freeman & Louca (2001) point out the international crisis of 1929 did not affect all economies in the same way. To illustrate the authors point out that during the 1929-1937 period the industrialisation process was reversed in Belgium (-9), USA (-8), Holland (-9), France (-28). However, in other countries the secondary sector enjoyed a healthy growth [Japan (+71), Greece (+51), Finland (+49), Sweden (+49), Hungary (+37), Great Britain (+24) Germany (+16), Austria (+6)].[66] Although the USSR is excluded it is obvious that Greece in the 1930s enjoyed a healthy industrial growth at the top of global industrialization figures.

However the 1929 had harmful ramifications for banking and for state finances. As already pointed out the state foreign currency and gold reserves were $55 million in 1928, but these were decreased in the following years. Thus the reserves in the Bank of Greece decreased to $40 million in 1929, $25 million in 1931 and just $21 million in 1932.[67] The collapse of foreign currency and gold reserves influenced the exchange rate between the drachma and other foreign currencies. Thus the exchange rate between the drachma and the £ changed from £1=375 drachmae in 1928 to £1=628 drachmae by the end of 1932 beginning of 1933. The exchange rate between the drachma and the $ was also affected. Thus the official exchange rate was $1=77.05 drachmae in September 1931 however by April 1932 the exchange rate was $1=120 drachmae. The devaluation of the currency during the 1929-1932 period triggered an outflow of banking deposits. Thus bank deposits decreased from 15,659,000,000 drachmae in December 31st 1930 to 13,736,400,000 drachmae in December 31st 1932.[68] The devaluation of the currency the reduction of gold and foreign currency reserves and the reduction of banking deposits made debt repayments difficult. Furthermore the access to foreign capital was extremely difficult due to the crisis. In 1932 total Greek external debt was $282,100,000 or 1,464,099,000 gold francs. Total internal debt was 11,379,830,780 drachmae.[69] In 1932 Greece had the highest per capita public debt across many European countries [Greece: $43.07, Romania: $32.26, Yugoslavia: $27, Hungary: $27.8, Poland: $13.8, Bulgaria: $18.8, Czechoslovakia: $12.1]. The Greek finance minister Varvaresos made in November 1933 a deal with Britain in order to reduce debt repayments. However the British side insisted on higher payments and this was an important reason for Greece to change its trade policy and endorse the barter exchange bilateral trade which Germany proposed.[70]

These developments forced Greece to abandon the gold standard in April 26th 1932 and in May 31st 1932 the state defaulted once again informing foreign lenders that debt repayments could no longer be made. The default of May 1932 followed a stabilisation programme which aimed primarily to re-value the drachma against the foreign currencies. Thus by 1934 the exchange rate between the £ and the drachma was again £1=543 drachmae. The partial stabilisation of the exchange rate allowed the Greek economy to revive. However public debt remained a problem due to high defence spending. The default of 1932 occurred in a sensitive period. In January 1933 Hitler became chancellor in Germany and from 1934 the clouds of war were gathering again in Europe. Greece had to increase defence spending a phenomenon which occurred across Europe after 1936 and the German re-occupation of the Rhineland. Thus defence spending for armaments and military installations from June 1935 until 1940 exceeded the astronomical amount of 4,000 million drachmae. Only for defence fortifications the amount of 1,457,975,336 drachmae was spent during 1936-1940; the remaining amount was spent on armaments and ammunition.[71]

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[66] See: C. Freeman & F. Louca: "As Time Goes By. From the Industrial Revolution to the Information Revolution", Oxford University Press, 2001, p. 268.

[67] See: L. Tloulfidis: "Economic History of Greece", University of Macedonia publications, Thessalonika, 2003, page 246.

[68] See: 1) Cath. Breyianni: "The Economic Crisis of the Interwar and Greece" in the periodical History, Volume 88 Issue 525, March 2012, pages 22-32, Papyros Press, Athens, 2) K. Kostis: "Banks and savings 1910-1940", in the volume: K. Bourazelis & Ch. Meidani (eds.): "Savings and Money management in Greek History", Postal Bank editions, Athens, 2001, pages 583-603. (in Greek).

[69] See: Tasos Minas Iliadakis: "Foreign lending in genesis and evolution of modern Greek state 1824-2009", Batsioulas publications, Athens, 2011, pages 186 and 195.

[70] I.D. Salavrakos: "Money, Politics and War: Cooperation and competition from the industrial revolution to the 21st century", Kadmos publications, Thessaloniki, 2008, page 316.

[71] See: I.D. Salavrakos: "Economy and Total War: The case of World War II", Volume II, Kritiki publications, Athens, 2008, pages 341-367. The economic relations of Greece at that time and their affect on the state's foreign relations are partially covered in the international bibliography as well. See: 1) G. Ranki: "Economy and Foreign Policy. The Struggle of the Great Powers for hegemony in the Danube valley 1919-1939", Columbia University Press, 1983, 2) P. Hehn: "A Low Dishonest

The Second World War erupted in September 1939 when Germany invaded Poland. Until June 1940 Germany occupied seven European countries (Poland, Norway, Denmark, Belgium, Luxembourg, Holland, France). Greece remained neutral; however in October 1940 Italy Germany's main ally invaded Greece. The Italian army was defeated and this forced Germany to intervene in April 1941 with simultaneous attacks against Yugoslavia and Greece. By the beginning of June 1941 both countries were under the Axis occupation. The economic catastrophes which occurred during the years of occupation (1941-1944) were immense.

To illustrate, when the victorious German army occupied Greece they ***immediately*** confiscated the following: 4,000 tons of figs (value 125,000 pre-war drachmae), 181,000 tons of raisins (of various varieties), 6,500 tons of cotton, 1,435 tons of coffee, 1,143-4,000 tons of sugar (value 17,500 gold British pounds), 7,000 tons of coal, 6,000 tons of distilled turpentine, 1,500 tons of resin, 8,000 tons of seed-oil, 2,520 tons of pulses, 200 tons of lentils, 1,000 tons of fat-oil, 2 million empty sacks, 120 million kilos of tobacco (unprocessed), 498 boxes of tea (value 7,000 gold British pounds), 870,000 empty parcels (value 17,000 gold British pounds), 76 tons of tin (value 17,500 gold British pounds), unspecified quantities of coal calcium (value 300 gold British pounds), 10,157 tons of coal, quantities of pigs fat (value 101.5 gold British pounds), quantities of wheat (value 80,000 gold British pounds), 1,415 parcels of yarn (value 38,000 gold British pounds), 1,500 pellets of wool, unspecified quantities of paper, rice, oil, benzene, mineral oils. Furthermore the Germans confiscated all machine-tools from the Greek industries. To illustrate the value of the machine-tools of the Bothosakis Heavy Industries (PYRKAL) were valued at 1,960,000,000 pre-war drachmae. The equipment of "Vassiliadis shipping industries", of the "State Aeroplane Factory", of the "Electrical Company" of the "Technical Industries" was all confiscated. In addition to this the Germans bought below the market price the following: 10,000 tons of olive oil, 200,000 tons of leather, 1,000 tons of liqueurs, 5 million kilo-grams of scrap iron, 200,000 kilo-grams of cocoons, 385,000 kilo-grams of locust-seeds, 110,000 tons of tobacco (processed production of 1940), the total production of oranges and acorns. (The Germans established an exchange rate of 1RM=60 Greek drachmas).[72]

Throughout the years of occupation (June 1941-October 1944) the economic exploitation (looting) of Greece was immense. The country was under the triple occupation of Germany, Italy and Bulgaria. The Germans looted 19,000 kilograms of silver and 83 kilograms of gold from the Bank of Greece (although the majority of Greek gold was transferred to the Middle East before the entry of German forces in Athens). The Germans looted 42 museums, 4 archaeological collections, and stole 140 pieces of vessels, 12 boxes with various archaeological objects, 122 coins, 8 Byzantine church items, paintings, books, and destroyed partially or completely 89 archaeological sights, 18 churches, 1 library, and made 24 excavations. Throughout the war the tobacco industry was delivering 2,800,000 cigarettes per day to the Germans. Throughout the war years 434 large vessels (total tonnage 1,361,331 tons) were either confiscated by the Germans or they were destroyed by German or Allied action. Furthermore other 478 small ships (total tonnage 46,484 tons) had the same fortune. Turning to the agricultural production the Germans confiscated agricultural products worth of 15,228,544,950 drachmae ($136,432,135). Furthermore they confiscated animal capital worth of 6,545,000,000 drachmae ($58,636,446). The damages to the fishing industry were estimated at 90,000,000 drachmae ($806,307) and the value of looted fishes was estimated 123,000,000 drachmae ($1,101,953). Turning to forests the value of looted timber was 2,490,500,476 drachmae ($22,312,322). In terms of agricultural farms, factories and stores and depots the damage to various buildings was estimated at 5,438,376,757 drachmae ($ 48,722,243) and the Germans confiscated buildings with a value of 1,620,662,830 drachmae ($14,519,466), obviously without paying any rent.[73] Finally only the exploitation of the Greek chrome mines provided the Third Reich with 25,991 tons of chrome.[74]

Decade The Great Powers, Eastern Europe and the Economic Origins of World War II 1930-1941", Continuum Press, London 2002.

[72] See: 1) I.D. Salavrakos: "Second World War-German Economy: Triumph, tragedy and irrationality, 1939-1945", Iolkos editions, Athens, 2009, page 258, 2) A. Velliadis: "Occupation. German policy and administration in occupied Greece 1941-1944", Enalios publishers, Athens, 2009, pages 72-73.

[73] See: I.D. Salavrakos: "Second World War-German Economy: Triumph, tragedy and irrationality, 1939-1945", Iolkos editions, Athens, 2009, pages 258, 259, 269-272, 285, 287.

[74] See: Wolfgang Schumann: "Grief nach Sudost Europa", VEB, Deutscher Verlag der Wissenschaften, East Berlin, 1973, page 14. At this point we have to stress the fact that before the re-unification of Germany scholars from the former East Germany had pointed out that Germany looted the occupied countries during the war years. Obviously the motive behind the (former) East German scholars was point out the criminal character of the Nazi regime. See also the following works: 1)

The exploitation of Greek industry was also immense. By July 1942 more than 300 factories were working for the German Armed Forces.[75] The financial exploitation was also immense. Across occupied Europe the Germans forced the local economies to pay for the expenses of the occupation armies and they also made the local economies to provide loans to the Third Reich. According to the official German History of the Second World War the financial burden for Greece was 500 m RM (Reichsmarks).[76] Ranki (1993) provides the estimate of 210 million RM.[77] Another source [Aly (2007)] provides the estimate of 1 billion RM.[78] The official history of the Greek nation points out that the financing of the occupation costs was made exclusively via money supply increases (which obviously triggered hyperinflation). The total amount of printed money is estimated at 3 trillion 400 billion drachmae. To illustrate only during July 1943 the Bank of Greece was printing 8 billion drachmae per day.[79] More recent sources point out that the total funds which Greece paid to the German during the occupation were 1,617,781,093,648,819 drachmae (or 5,673,273 gold pounds). From those the 87,747,791,120,000 drachmae (or 2,002,663 gold pounds) were the cost of financing the occupation forces in Greece; whereas the remaining 1,530,033,302,528,819 drachmae (or 3,670,610 gold pounds) were the credits (money transfer loans from Greece to Germany).[80] Furthermore one has to add the looting of Greek-Jews. From a potential Greek-Jewish wealth of $60-80 million the Germans looted $54 million.[81]

Turning to the Italian looting this was as follows: The Italians looted 33 museums, 2 archaeological sights, and removed 364 items, 5 statues, 845 coins, 7 church items. They also destroyed 39 archaeological sights, 1 Byzantine church, 1 museum. Damages were made in 4 more museums and 2 illegal excavations were also made. The Italians also looted agricultural products worth of 3,361,008,007 drachmae ($30,111,163). The confiscated animal capital was valued at 7,273,260,960 drachmae ($65,160,912) and the damages to livestock were estimated at 1,963,500,000 drachmae ($17,590,934). In the fish industry the Italians confiscated fishes valued at 80,000,000 drachmae ($716,718) and they destroyed fishes of 62,000,000 drachmae value ($ 555,456). In terms of agricultural farms, factories and stores and depots the damage to various buildings was estimated at 2,620,348,998 drachmae ($23,475,628) furthermore they used (confiscated) facilities worth of 794,179,392 drachmae ($7,115,033).The Italians also confiscated timber valued at 275,036,625 drachmae ($2,464,044); and they destroyed forests valued at 813,086,625 ($7,284,417) [82] In the case of Italy (just as in the case of Germany) Greece was obliged to pay the occupation cost of the Italian garrisons, and also had to make loans to Italy. The occupation cost of the Italian armed forces was 63,425,551,480 drachmae (or 1,378,338 gold pounds). The Greek loans to Italy were 157,053,637,000 drachmae (or 835,616 gold pounds). It is obvious that the total monetary cost to Germany and Italy was 1,618,001,572,837,299 drachmae or (7,887,227 gold pounds).[83] However this is not the complete list, since it was Bulgaria as well. Turning to Bulgaria the Bulgarian army looted 9 museums, 4 complete archaeological collections, 11 statues, 3 antiquity coins, 31 church icons.

Dietrich Eichholtz: "Geschichte der Deutschen Kriegswirtschaft 1939-1945", K.G. Sauer Verlag, Munich 2003, second edition of the former East German edition of 1969-1971. See also: Lotte Zumpe: "Wirtschaft und Staat in Deutschland 1933 bis 1945', Akademie Verlag, East Berlin, 1979. Contrary to this the reader should compare and contrast the writings of Werner Abelshauser: "Germany: guns, butter and economic miracles", in the volume: Mark Harrison (ed.): "The Economics of World War II", Cambridge University Press, 1998, pages 122-176, were there is no analysis about the contribution of the economies of the occupied countries to the German war effort.

[75] See: A. Velliadis: "Occupation. German policy and administration in occupied Greece 1941-1944", Enalios publishers, Athens, 2009, page 74.

[76] See: Germany and the Second World War, Volume V/II, "Organization and Mobilization in the German Sphere of Power. Wartime Administration, Economy and Manpower Resources 1942-1944/5", Oxford University Press, 2003, page 228.

[77] See: G. Ranki: "The Economics of the Second World War", Böhlau Verlag, 1993, page 338.

[78] See: Götz Aly: "Hitler's beneficiaries. Plunder, racial war and the Nazi welfare state", New York, 2007, page 287.

[79] See: History of the Greek Nation, Volume 16, Ekdotiki Athinon publishers, Athens, 2000, pages 58 and 62-63.

[80] See: Dimosthenis Koukounas: "The Greek economy during the occupation", Erodios publishers, Thessalonika, 2012, pages 458-459, 507.

[81] See: Nazi Gold, International Conference, London, 2-4 December 1997, published by the Foreign & Commonwealth Office, 1998, page 754.

[82] See: I.D. Salavrakos: "Second World War-German Economy: Triumph, tragedy and irrationality, 1939-1945", Iolkos editions, Athens, 2009, pages 269-271, 285.

[83] See: Dimosthenis Koukounas: "The Greek economy during the occupation", Erodios publishers, Thessalonika, 2012, pages 458-459, 507.

They also perished 3 archaeological sights. They also confiscated 35,000 tons of tobacco, 113 ships, 130 trains, 3,303 cargo wagons, and 200 passenger wagons. Turning to agricultural production the Bulgarians destroyed various products valued at 7,826,057,971 drachmae ($70,113,402); whereas the looted agrarian production is unknown. Turning to animal capital the Bulgarian destroyed animals valued at 1,482,000,000 drachmae ($13,277,227). Finally they confiscated timber valued at 156,000,000 drachmae ($1,397,599) and they destroyed forests valued at 1,247,416,653 drachmae ($11,175,566).The total damages to the Greek economy by the Bulgarians has been estimated to $985,469,993[84] To complete the picture of material damage we point out that from 1,730,000 buildings across Greece in 1940 the 401,000 were perished. Turning to the railway network from 313 locomotives the 278 were destroyed, from 567 passenger wagons the 510 were lost, and from 5,602 cargo wagons the 5,286 were lost. As far as the network this was perished and no line was operational. Turning to vehicles the situation was as follows: From 8,700 cars 5,650 were lost. From 2,600 buses the astonishing figure of 2,100 was lost; and from 5,900 trucks the 3,550 were lost. The damages to the terrestrial network were estimated at 400 million pre-war drachmae. The damages to ports were $12,584,825.[85]

The constant and out of control print of money caused immense hyperinflation. According to one source, "by the middle of 1942 the price level in Greece had already increased by 340 per cent".[86] As another source points out: "The Greek currency collapsed under the strain…".[87] The above assertion is backed by the evidence provided in various Greek sources. To illustrate, Koukounas (2012) provides the complete evolution of the exchange rate between the drachma and the gold pound (GP) during 1941-1944. This was as follows: 1) May 1st 1941: GP1=3,000 drachmae, 2) October 1st 1941: GP1=13,000 drachmae, 3) October 1st 1942: GP1=219,000 drachmae, 4) October 1st 1943: GP1=610,000 drachmae, 5) October 1st 1944: GP1=80 billion drachmae.[88] Inflation during the occupation skyrocketed. To illustrate, the price of bread was as follows: April 1941: 10 drachmae, January 1942: 230 drachmae, July 1943: 2,000 drachmae, January 1944: 38,000 drachmae, September 1944: 153,000,000 drachmae.[89] The German sources point out that between October 1940 and July 1944 the prices of consumer goods in Greece were increased by 858,272 times higher.[90] The human cost was also immense. The casualties in the Italian and German wars (October 1940-June 1941) were 13,676 dead and 42,485 wounded. During the occupation years 68,000 civilians were executed (35,000 by the Germans, 25,000 by the Bulgarians and 8,000 by the Italians). Furthermore another 190,000 were imprisoned (100,000 by the Germans, 55,000 by the Bulgarians, 35,000 by the Italians). In addition 88,000 were taken hostages (40,000 by the Germans, 30,000 by the Bulgarians, 18,000 by the Italians).[91] However it was the food shortage which really perished the civilian population. It is estimated that 420,000-465,000 were the total victims of starvation.[92]

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84 See: I.D. Salavrakos: "Second World War-German Economy: Triumph, tragedy and irrationality, 1939-1945", Iolkos editions, Athens, 2009, pages 269-271, 285-286.

85 The above data and those reproduced in various books are mainly based on the two main reports which Greece provided to the Supreme Allied Committee after the war. The damages to archaeological sights museums etc which refers in the current work is not the complete own, since this would require volumes. At the moment there is an immense intellectual interest about the damages to the Greek economy by the two world wars. These are at the moment collected across Greece in municipalities, villages, ministries, churches etc and the complete documentation is expected to appear in 761 volumes! See the monthly paper "Mnimi kai Hreos" (=Memory and Duty), Issue 47 (121), March 2013.

86 See: Adam Tooze: "The Wages of Destruction. The making and breaking of the Nazi economy", London, Allen Lane, 2006, page 643.

87 See: Alan Milward: "War, Economy and Society 1939-1945", Allen Lane, 1977, London, page 108.

88 See: Dimosthenis Koukounas: "The Greek economy during the occupation", Erodios publishers, Thessalonika, 2012, pages 510-519.

89 See: I. K. Holevas: "War Reparations", Pelasgos editions, Athens, 1995, page 21.

90 See: W. A. Boelcke; "Die Kosten von Hitlers Krieg", Paderborn Verlag, 1985, page 136.

91 See: I. K. Holevas: "War Reparations", Pelasgos editions, Athens, 1995, page 20.

92 See: 1) I. K. Holevas: "War Reparations", Pelasgos editions, Athens, 1995, page 209, 2) History of the Greek Nation, Volume 16, Ekdotiki Athinon publishers, Athens, 2000, page 63. The extensive analysis of the economic cost of the triple occupation of Greece does not have a vindictive attitude or innuendo, against Germany, Italy or Bulgaria. All the three states have their contribution to European history and civilization. Germany and Italy are well known for their contribution to arts (music, sculpture, paintings, poetry etc.) and sciences (chemistry, physics, medical sciences) Bulgaria has contributed to the Christian Orthodox civilization. Furthermore Germany also suffered from the war with the destruction of its cities and more than ten million people dead, wounded, crippled or missing. Therefore the point here is not to create a historical animosity

During the war and occupation years Greece had five governments. The Metaxas government continued from October 1940 until January 29th 1941, when Metaxas passed away and he was replaced by Alexander Korizis who was the Governor of the National Bank of Greece at that time. This government continued until April 18th 1941, when Korizis committed suicide. He was replaced by the government of Emmanuel Tsouderos (April 21st 1941). This was the last government appointed by the Greek king. Then three "governments" followed. These of course were not elected but they were imposed by the German occupation authorities. The first was the government of General George Tsolakoglou. This government lasted from April 30th 1941 until late November 1942 when it was replaced by the government of Professor Constantine Logothetopoulos. Finally this government was replaced in April 6th 1943 by the government of Ioannis Rallis, which continued until October 1944.

The Greek odyssey however does not terminate in October 1944. When the Germans left Greece, a new government took office under George Papandreou. However, the country would face a terrible civil war in two periods: First, during December 1944-February 1945 and then during March 1946-August 1949. The economic and social cost of the civil war was immense. According to one source the human cost was 54,000 Greek civilians dead and 15,969 military casualties. Furthermore, there were 37,557 wounded military personnel. From the Communists side the battle casualties were 36,839; however total casualties were around 50,000. Turning to the economic cost the direct cost of perished infrastructure (buildings, roads, bridges etc) was estimated during the 1950-1951 period at $250 million (at 1948 prices). If we add to the above sum the cost of refugees support, lost working hours, damaged infrastructure etc then the overall economic cost is calculated to $1 billion (1948 prices).[93]

The conduct of economic policy was extremely difficult during those turbulent times. The first major problem which was already present in the economy from the era of German occupation was that of hyperinflation. Money supply (drachmae in circulation) were 1,523,000,000,000 in December 1944 and the exchange rate between the gold pound and the drachma was G£1=3,040 drachmae. In December 1945 the drachmae in circulation were 102,200,000,000 and the exchange rate was G£1=180,000 drachmae. In December 1946 the money in circulation were 437,500,000,000 and the exchange rate was G£1=137,000 drachmae. In March 1947 the money in circulation were 559,900,000,000 drachmae and the exchange rate was G£1=128,000 drachmae.[94] During this early turbulent period to monetary reforms took place. The first occurred on November 11th 1944. That day a new drachma was set up and the exchange rate was 1 new drachma (NDR)=50 billion old drachmae (ODR). The exchange rate between the £ and the NDR was £1=600 NDR, which was almost the pre-war exchange rate. The exchange rate between the $ and the NDR was set at $1=149 NDR. However the NDR started to loose its value thus the exchange rate by December 1945 was £1=21,412 NDR and the exchange rate with the US dollar was $1=6,923 NDR. Under the circumstances on January 24th 1946 a second monetary reform was introduced. The exchange rate of the drachma with the pound (£) and the US dollar ($) was again re-established. The new official exchange rate was £1=20,000 drachmae and $1=5,000 drachmae.[95]

The new exchange rates however were associated with additional measures. Thus imports were liberalised and all taxes on foreign currency transactions were abolished. Furthermore individuals were free to deposit up to £100 foreign currencies in their bank accounts. The abolition of import restrictions allowed Greece to import capital goods and the necessary equipment (machine tools, and agricultural machinery) in order to rebuild its industrial and agricultural production. Furthermore, in order to combat inflation the government decided via emergency legislation that all wages would be determined by the government and not via negotiations between employers and employees. The outcome of these reforms created the first positive signs in the economy.

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but simply to demonstrate that economic damages were extensive, thus EU cooperation is the only guarantee that something similar will never occur in Europe again.

93 See: E. Averof Tositsas: "Fire and ax", Estia publications, Athens, 1975, pages 474-475.

94 See: G. Stathakis: "The Truman Doctrine and the Marshall Plan. The History of US aid to Greece", Vivliorama editions, Athens, 2004, page 130 (in Greek).

95 See: G. Stathakis: "The Truman Doctrine and the Marshall Plan. The History of US aid to Greece", Vivliorama editions, Athens, 2004, pages 86-88 and 131.

To illustrate the index of industrial production was developed as follows: 1939=100, December 1945=35, December 1946=61.1, January 1947=62.2, January 1948=68, December 1948=85.5, August 1949=89, December 1949=97. Turning to the index of agricultural production this was as follows: 1938=100, 1947=89, 1948=94, 1949=104.[96]

However, although agricultural and industrial production were recovering the real wages were declining thus the purchasing power of consumers was declining. To illustrate inflation index was as follows: 1939=1, January 1947=186.5, December 1947=272.9, January 1948=281.7, December 1948=347.6, January 1949=351.9, December 1949=340.4. Throughout the period wages were increased only twice (in November 1947 and in the summer of 1949) and furthermore an additional depreciation of the drachma occurred on September 21st 1949; when the drachma lost 30% of its value against the £ and 50% of its value against the US dollar.[97]

The fiscal evolution of the state finances was once again problematic. The total government revenues for the December 1944-December 1945 were 59,853 million drachmae but the government expenditure was 129,614 millions drachmae; thus the deficit for the year was 69,761 millions drachmae. The total government revenues for the period January-December 1946 were 1,281,324 millions drachmae and the government expenditure was 1,779,342 millions thus the deficit for 1946 was 498,018 millions drachmae. The government budget for April 1947-June 1948 was having 2,753 billion drachmae revenues and 2,960 billion drachmae expenditure thus the deficit was 207 billion. The budget for the 1948-1949 fiscal year was 3,102 billion drachmae of revenues and 3,848 billion of expenditure thus the deficit was 774 billion drachmae.[98]

It goes without saying that throughout the period Greece was fully dependent from external aid and in particular US aid. The total US aid to Greece during the 1945-1950 period (including funds from the Marshall Plan, food imports, medical supplies and other types of assistance) is estimated at $2.1 billion which is the biggest aid that US provided to any country (according to each population).[99]

The first US mission to Greece arrived in Athens in January 1947. The head of the US delegation was Paul R. Porter (1908-2002) who provided the following assessment on the Greek economy and society in a letter dated February 14th 1947 and addressed to the US vice secretary of foreign affairs W.L. Clayton: “Here there is no state according to Western standards. Instead there is a relaxed hierarchy of individualistic politicians, some of them are worse than others, who are obsessed with their personal struggle for power [thus] they have no time to develop an economic policy, even if we assume that they have the capability…Across the country from one end to the other there is a grey …deep shortage of faith for the future – a shortage which leads to complete inertia at present. People are paralysed from uncertainty, and fear, the entrepreneurs do not invest the shop retailers do not store goods…The public administration is too extensive. The low wages are increased on the basis of a totally muddled system of benefits and allowances; thanks to which some civil servants earn as much as four times above their basic salary…Never again I have observed such an inadmissible civil service…it is impossible to presume that the civil service will materialize even the most simple functions of a government –tax revenues collection, implementation of economic rules [and] road repairs…The Greek government has no other policy option other than asking for foreign aid in order to remain in power pointing out uproariously the sacrifices of Greece…the aim is to use foreign aid as means of perpetuating the privileges of a small clique [of people] which consists the invisible power of Greece…Nowadays the Greek shipping is booming and the ship-owners have immense profits. However there is no state benefit out of this wealth…The Greek state by requesting foreign aid …has imposed limits to its national sovereignty…”.[100] The above assertions demonstrate vividly the institutional failure of the Greek state of that time.

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[96] See: G. Stathakis: “The Truman Doctrine and the Marshall Plan. The History of US aid to Greece”, Vivliorama editions, Athens, 2004, pages 104 and 263.
[97] See: G. Stathakis: “The Truman Doctrine and the Marshall Plan. The History of US aid to Greece”, Vivliorama editions, Athens, 2004, pages 197, 260 and 349-350.
[98] See: G. Stathakis: “The Truman Doctrine and the Marshall Plan. The History of US aid to Greece”, Vivliorama editions, Athens, 2004, pages 132, 190-191, 242-243.
[99] See: A. Aggelopoulos: “Economic Views 1946-1958”, Athens, 1958, page 32 (in Greek).
[100] Originally published in the Greek daily newspaper “Elefteria” 1st, 9th and 10th of May 1947 republished in http://www.geopolitics.com.gr [retrieved 23-10-2013].

It demonstrates also that the routes of Greece's economic problems are not the economic policies conducted by one government or minister but they are associated with failed institutions and specific cultural traits (a point which will be addressed later). To sum up the Greek state during the 1941-1950 period had experienced two wars one with Italy and one with Germany a triple occupation and a civil war. Turning to governments it had three governments during the occupation years and three more governments were in exile during the occupation years (the first was the government of Emmanuel Tsouderos which lasted from April 21st 1941 until April 14th 1944; the second was the government of Sophocles Venizelos which lasted from April 14th-April 26th 1944 and the third was the government of George Papandreou which started from April 26th 1944 and it was the one which entered the liberated Greek capital on October 18th 1944). After the liberation the country during the period October 1944-March 1950 experienced 14 governments. It goes without saying that during the civil war era Greece had another government under the communists the so called "Government of the Mountain or the Provisional Democratic Government of Greece" (from December 1947 until August 1949). From an institutional point of view Greece remained a kingdom throughout the 1941-1950 period although until the King's return on September 1946 a viceroy was appointed.

4. Overall assessment of the 1830-1950 period: Square of Power and Diamond Model.

In a period of 120 years Greece experienced: 155 governments, 12 military interventions and coup d' etats, 11 internal revolts and civil wars, 7 foreign military interventions. In addition the country was involved in 6 wars from those 3 were victorious and the other 3 were military catastrophes, and in 2 guerrilla type warfare conflicts (one in Crete during the periods 1866-1869, 1895-1898, 1905 and one in Macedonia during the period 1904-1908). The institutional structure of the state has changed 7 times from Parliamentarian structure (1830-1832), to absolute monarchy (1833-1843), constitutional monarchy (1844-1924), Presidential republic (1924-1935), Constitutional monarchy (1935-1936), Monarchy and Dictatorship (1936-1941) and constitutional monarchy (1944-1950).! There is no other European country with such volatile modern political history. Throughout the period Greece experienced five defaults (1836, 1843, 1893, 1922-1923, 1932).[101]

However in spite of the immense volatility the country was able to expand its territory from 47,516 square km in 1832 to 131,957.4 square km in 1950. The population of Greece increased from 750,000 inhabitants in 1832 to 7,632,801 inhabitants in 1951. Thus the territory was increased by 63.99% and the population was increased by a factor of ten. Under the circumstances the outcome is impressive. However even at that time an alarming demographic development occurred which no-one paid any attention. From the 7.6 million inhabitants the economically active population (i.e. those available to work) were only 51% of the total; the remaining were elderly people, children and infants or people unable to work for various reasons.[102]

Applying the Square of Power model we can easily point out the following: The state apparatus and especially the tax collection authorities as well as the civil service in general did not function efficiently. There were two reasons for this inefficiency. The former was associated with the low level of human capital in general. Thus illiteracy rates were still high in Greece in the end of the 1940s period. According to Samios (2012) by the end of the civil war the 40.8% of the population was illiterate.[103] The second reason for civil service inefficiency was the intensive internal political struggles which paralyzed the function of ministries and other state authorities. Every minister simply did not trust the civil personnel and was replacing them with individuals that he could trust. The constant changes of personnel paralyzed the administration. Turning to the parliament's function and its ability to create legislation which could provide a consensus among the various social classes it has to be noted that this was attempted during the years of certain governments. Thus Trikoupis, Venizelos and even during the Meataxas dictatorship attempts were made to create a welfare state and provide across Greeks the needed public goods (education, health care, security, etc.).

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[101] A sensitive point needs clarification. We consider the defaults which occurred after 1830, thus after the formal treaty of the recognition of the independence of the new state. However even before the formal recognition on April 8th 1827 the Greek Provisional Government had declared that the debt from the loans of 1824, 1825 could not be repaid; thus if we include the 1827 default we have six.

[102] Data for 1951 obtained from Tasos Minas Iliadakis: "Foreign lending in genesis and evolution of modern Greek state 1824-2009", Batsioulas publications, Athens, 2011, page 228.

[103] See: Panayiotis Samios: "The rocky years of education" (Ta petrina xronia tis ekpaideufsis), Athens, August 2012 in http://www.alfavita.gr/sites/default/files/attachments/tapetrinaxroniathsekpaideusis.pdf [retrieved 26-10-2013].

However these attempts either collapsed completely due to economic, social and political developments or they were never fully implemented and materialized. The ability of the central bank to control money supply and thus control inflation was again problematic for the period. In most of the period there was no central bank and the National Bank of Greece was playing that role. However the value of the currency was constantly decreasing; thus most Greeks did not trust the drachma and they switched to other currencies or gold and silver in order to protect their savings. Most of the period can be characterised as a high inflation period.

Finally the debt was a constant problem for all Greek governments of the 1830-1950 period. The five defaults is adequate proof of the assertion. By fiscal year 1950-1951 the pre-war Greek debt was 2,608,019,434,568 drachmae and the post war public debt was 217,000,000,000 drachmae; thus total public debt was 2,825,019,434,568 drachmae.[104]

Turning to the Diamond Model again the picture remains problematic. One of the key elements of the Diamond is the “local demand conditions”. If local demand is associated with high quality products local enterprises are forced to produce them; thus they can easily compete in the international markets as well. The quality of products which the Greek consumers needed in the late 1940s early 1950s was beyond doubt extremely low. Even the most basic consumer’s needs were covered by imported goods or from the US aid. The quality of local production (in sectors where this existed) was extremely low.

The second element “related and supporting industries” a factor which supports the development of national advantage in selective industries and sectors was again completely absent from the Greek economy in the early 1950s. The economic losses due to the occupation and the civil war and the complete destruction of all types of infrastructure (bridges, roads, railway network, ports etc) deprived Greece from any supporting industry.

The next element that of production factors was again problematic. As already pointed out from a population of 7.6 million inhabitants the 40.6% was illiterate thus low quality labour and furthermore, only the 51% of the total was economically active. Turning to the Greek entrepreneurs, bankers and ship-owners the picture was again problematic. The majority of them did not want to invest in Greece and this is very well substantiated not only from the earlier reference to the reports of Paul R. Porter, but also from the following description of events by one of the biggest Greek industrialists Bothosakis; who points out the following: “The tragic events of December 1944 and the…anomaly of the 1946-1949 years …created immense concern to Greek entrepreneurs. Many were panicked …for those the only solution was the rush to America. Bothosakis reacted fiercely to this prospect…However the mentality could not be altered …[since] industrialists were in constant conflict with the state. This [was occurring] because of the state intervention policies which made entrepreneurs de facto civil service workers”.[105]

The final element is firm’s strategy, structure rivalry. According to Porter immense domestic competition will force firms to innovate in order to gain market share or they may follow a strategy of internationalization; thus expand their activities abroad and become multinationals. Furthermore the internal structure of any firm (family unitary form versus multidivisional M-form) will have implications for organisation, markets, transaction costs etc. In the early 1950s the majority of Greek firms were family oriented and their aim was simply to serve the local not even the whole of the domestic market. Only a very small number of enterprises had a broader extrovert orientation and strategy. The above demonstrate that Greece did not have the foundations to “fuel” a constant economic development process. Thus any development process would face various types of limitations and barriers somewhere in time.

5. The modern era (1950-2013) and future prospects.

It is obvious that debt was a problem throughout modern Greek history. The Greek debt remained high during the years of reconstruction (1950-1974) and started to increase in the 1970s due to the two international oil crises. To illustrate in 1958 the total pre-war debt was 18,446,318,088 drachmae and the post-war debt was 3,338,213,857 drachmae. Thus total debt was 21,784,531,945 drachmae.

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[104] Calculated by data provided in Tasos Minas Iliadakis: “Foreign lending in genesis and evolution of modern Greek state 1824-2009”, Batsioulas publications, Athens, 2011, pages 523-524.

[105] See: Kostas H. Hatziotis: “Proodromos Bothosakis Athanasiadis 1891-1979”, Bothosakis Foundation editions, Athens, 2005, pages 236-237.

In 1962 and 1965b two agreements were made between Greece and its international creditors for the pre-war debt repayments and in 1966 the pre-war debt was reduced to 4,356,465,233 drachmae and the post war debt was 26,128,873,673 drachmae. Thus total debt was 30,485,338,906 drachmae. However the growth rate of the economy was extremely high at that time. To illustrate the average annual growth rate during the 1950s was 6.9%; whereas in the 1960s decade was 7.9%. Thus for the period 1955-1973 the average annual growth rate was 6.5%. With high growth rates debt repayments were not an immense problem.[106] The 1970s however due to the two oil crises and the Cyprus issue is an essential landmark. In the 1970s the debt starts to increase more rapidly than in the 1950s and 1960s and at the same time the GNP growth rates start to decline.

Thus in 1974 the total Greek debt was 114,113,883,110 drachmae and by 1981 it was 589,402,110,283 drachmae (current prices), or the debt has increased by 416.5%, under the conservatives. Between October 1981 and July 1989, under the socialists public debt increased from 589,402,110,283 drachmae to 5,198,954,214,338 drachmae thus it had increased by 782%. From April 1990 until October 1993 (conservative government) the debt was increased to the level of 20,553,110,022,955 drachmae or by 295.3%. Under the new socialist government October 1993-January 1996 the debt was increased to 27,905,346,411,850 drachmae or by 35.77%. By 2003 public debt was 58,369,823,742,123 drachmae (or €171,323,227,890); and by March 2004 when the conservatives were re-elected the debt was almost €184.5 billion. By October 2009 the debt was €292 billion; thus an increase of 58.26%. In the third quarter of 2010 it was €329.513 billion, in the third quarter 2011 it was €355.658 billion and in the third quarter of 2012 it was €303.918 billion; however by the second quarter of 2013 it was again €316.9 billion.[107] The debt had exceeded the 100% level of GNP already from the 1990s and remains above the 100% level until today.

As already pointed out the nominal increase of the debt is not a problem as long as the GNP growth rates can assure that repayments will occur. However as already pointed out the high growth rates of the 1950s and 1960s decades were replaced by lower rates. Thus in the 1975-1993 period the annual average growth rate was just 2%, that is just one third of the previous period.[108] For the 1994-2004 period which was associated with the Olympic Games the average annual growth rate was 3.46%.[109] The average annual growth rate for the period 2005-2009 was 4.58% and the evolution of GNP during the 2010-2012 period was -5.8%.[110] From the above it is obvious that the current economic problem of Greece is routed back in the 1970s. We also have to point out that throughout the period the country has failed to attract major FDI inflows. As Gianitsis (1988) points out: "during the 1963-1978 period total FDI inflows [in the secondary sector alone] were $640.1 million. This figure does not include the value of imported machinery and machine tools…however from the above amount total capital worth of $283 million was expatriated again …". The pattern of foreign FDI also changed. To illustrate in 1968 the synthesis of FDI in industry was as follows: Food - Beverages and clothes: 7.9%, Non ferrous metals: 7.2%, chemical, oil industries & plastics: 37.6%, metallurgy: 36.9%, machinery & electrical equipment: 4.3%, other industries: 6.1%. In 1979 the synthesis was as follows: Food - Beverages and clothes: 18.1%, Non ferrous metals: 15.3%, chemical, oil industries & plastics: 20.3%, metallurgy: 21.5%, machinery & electrical equipment: 8.2%, other industries: 16.6%.[111]

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[106] See: 1) Tasos Minas Iliadakis: "Foreign lending in genesis and evolution of modern Greek state 1824-2009", Batsioulas publications, Athens, 2011, pages 258-270 and 523-524, 2) Th. Lianos & S. Lazaris: "The evolution of the basic macroeconomic factors of the Greek economy in the post war period", in the volume: A. Kintis (ed.): "2004: The Greek economy in the doorstep of the 21st century", Ionian and Popular Bank of Greece, Athens, 1995, pages 45-84 and especially page 46.

[107] See: Tasos Minas Iliadakis: "Foreign lending in genesis and evolution of modern Greek state 1824-2009", Batsioulas publications, Athens, 2011, pages 489-491 for the period 1974-2009 and for the period 2010-2012 see http://www.pdma.gr for the 2013 data see: http://www.newsbomb.gr

[108] See: Th. Lianos & S. Lazaris: "The evolution of the basic macroeconomic factors of the Greek economy in the post war period", in the volume: A. Kintis (ed.): "2004: The Greek economy in the doorstep of the 21st century", Ionian and Popular Bank of Greece, Athens, 1995, pages 45-84 and especially page 46.

[109] See: A.P. Bitzenis: "Globalisation, multinationals, investments and European integration in the new global economic system", Stamoulis editions, Athens, 2009, page 574. (in Greek).

[110] See data obtained from the "2013 Budget-preliminary report" , October 2012, page 76.

[111] See: T. Gianitsis: "The Greek industry", Gutenberg editions, Athens, 1988, pages 271-355 for an ample discussion and especially pages 276, 282-283.

For the whole 1955-1982 period total foreign FDI inflows, across the economy, were $1,226.2 million whoever total outflows were $999.7 million, thus the net inflows were $226.5 million.[112] Although in absolute numbers FDI inflows increased throughout the period in relative terms Greece remained an isolated location from FDI. To illustrate, Staboglis (2008) points out that: "From a total of 140 countries which are under UN surveys Greece constantly is between 120th and 127th position [in terms of its ability to attract FDI]….Between 1995-2000 FDI inflows increased in Greece by 3%, whereas in Spain the increase was 309%, in Portugal it was 891%, and in Ireland it was 1,733%".[113] According to another study, between 2004-2010 average FDI inflows in EU countries (expressed as a percentage of GNP) were 3.7%, but in Greece they were just 1%.[114] Inflation throughout the period was high with the exception of the 1997-2007 period.

Turning to the political evolution a dichotomy has to be imposed in 1974. Thus during the March 1950-July 1974 period Greece was a kingdom and it had experienced 25 governments –however from those only 21 were democratically elected since the last four were governments imposed by a military cout d' etat which occurred in Greece in April 1967 and lasted until July 1974. In the post 1974 period Greece became a republic and during the 1974-2013 period the country had 11 different governments, almost all were either from the conservative or the socialist parties.

The current economic challenge for the Greek economy is –according to the conventional view- the establishment of permanent fiscal surpluses which will make debt repayment easier. The debt is certainly the most crucial focus of economic policy. However, according to the author of the current paper the most essential issue is not the debt per se. It is true that in the second quarter of 2011 the ***public*** debt was as follows in the major western economies Greece (as a % of GNP): 132%, Italy: 111%, Ireland: 85%, Portugal: 79%, Spain: 71%, UK: 81%, France: 90%, Canada: 69%, USA: 80%, Japan: 226%, Germany: 83%. However the public debt does not reflect the real picture. To this all types of private debt have to be added such as mortgages, credit cards debt, student loans etc. If all types of private debt are included then the data for ***total*** debt across the major western economies is as follows (as a % of GNP always for the second quarter of 2011): Greece: 267%, Italy: 314%, Ireland: 663%, Portugal: 356%, Spain: 363%, UK: 507%, France: 346%, Canada: 276%, USA: 279%, Japan: 512%, Germany: 278%. The above data illustrate that a ***debt bubble*** exist across the major western economies which if explodes the 1929-1930s crisis will be an anecdote compared to the harmful effects which will be produced by this situation. Thus our point is that Greek debt should not be the main focus of economic policy which after all is much smaller compared to that of other countries.

Looking at the current economic evolution in Greece it is other statistics which create a very alarming picture and not the debt level. When in May 2010 Greece asked for loans from the EU, the ECB and the IMF a programme for the stabilization and the development of the economy was introduced. The programme was aiming at fiscal stabilisation via tax increases and government spending cuts (including the salaries and pensions across the public sector). Furthermore the programme aimed to promote foreign and national private investments across all sectors of the economy in order to create jobs and growth. However it was only the fiscal stabilization part which was fully implemented. In order to provide an idea we just mention that the property taxes increased by 684.4% in five years time thus from €526 million in 2009 to €2.75 billion in 2013 and the estimate for 2014 is €2.9 billion! At the same time (between December 2008- December 2012) due to the austerity programme 110,109 enterprises terminated their operations across all industries. The result was immense unemployment. To illustrate in the construction industry from 214,005 workers in 2009 only 73,800 remained in December 2012. In retail and wholesale trade from 444,425 workers only 328,813 remained. In the heavy and light procurement industry from 348,259 workers only 222,950 remained. In the hotels & restaurants industry from 126,650 workers only 103,937 remained. In property agents market from 146,744 workers only 135,088 remained. In transport & telecommunications sector from 126,843 workers only 108,519 remained. In the extractive sector (mines etc) the number of employees was reduced from 7,876 to 5,937. In the private education sector the number of employees was reduced from 115,233 to 100,576.

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[112] See: D. Staboglis: "Foreign Investments in Greece A love-hate relationship", Kerkyra-Economia publishing, Athens, October 2008, page 49. Figures refer to primary, secondary and tertiary sectors of the economy altogether.

[113] See: D. Staboglis: "Foreign Investments in Greece A love-hate relationship", Kerkyra-Economia publishing, Athens, October 2008, pages 7-8. (in Greek).

[114] See: G. Romeos: "Foreign Investments", Vima daily, 9-10-2011.

In the primary sector of the economy those officially registered as farmers were reduced from 9,864 to 4,763; however the real picture in the employment of the primary sector is unknown. The only exceptions were the health industry were the employees increased from 87,814 to 90,693 and the banking and financial industry sector were the employees increased from 65,128 to 72,203. Thus whereas in 2008 total employment in the private sector was 1,692,841 workers and by 2012 it was reduced to 1,247,279; thus 445,562 workers became unemployed.[115] The total number of employed versus unemployed in the economy across all sectors has been evolved as follows: In April 2008 there were 4,551,846 individuals employed and 386,531 unemployed. In April 2013 there were 3,636,042 employed and 1,337,621 unemployed. During the same period the non-economically active (children, pensioners, etc) were 3,392,289 and 3,337,051 respectively. Thus unemployment increased from 7.8% in 2008 to 26.9% in 2013 (April basis).[116]

In order to finance their lives and pay the additional taxes imposed the Greeks had to rely on their banking deposits. Thus the deposits of households and enterprises in Greek banks were reduced from €237.53 billion in December 2009 to just €162.38 billion in July 2013.[117] It is obvious that if the current policy continues unchanged then the Greek banking sector will collapse and that will either create a default and exit from the euro-zone or the ECB and Greece's EU partners will be forced to implement an additional programme in order to save the Greek banks (similar to the one which is implemented in Spain) and thus a new debt spiral will emerge. Thus modifications to the current policy are needed with emphasis in attracting FDI and implementing privatization programmes. No additional taxes or wage decreases can reduce the debt or the deficit.

6. Conclusions

Summing up our analysis the following concluding remarks can be deducted:

1. The Greek economy had experienced tremendous nominal and structural problems throughout the 1830-2013 period. Debt was always a problem in the Greek economy and it certainly did not appear in the late 2007 due to the global economic crisis. The crisis simply demonstrated the fragile fiscal Greek situation.
2. Greece was never able to follow the doctrines and policies of the industrial revolution. Even during the era of high GNP growth rates and high industrial production this was mainly associated with labour-intensive consumer goods and not with capital-intensive or high technology goods and products. Thus the structure of the Greek economy was always fragile and especially vulnerable to economic cycle. Thus the application of traditional growth theories in the Greek case is at least an incomplete method to analyse development, however it may also be utterly incorrect due to the character of the specific political and social traits. In Greece capital formation was always problematic and the labour force was of low quality for a big period of time, due to high illiteracy rates (a situation which was reversed only from 1960s onwards); thus economic development theories which emphasized on the nexus of capital-labour as a driving force for development cannot be applied.
3. The complex political developments and the instability of the 1830-1950 period created a state where the civil service was extremely inefficient and the welfare state although formally / legally established did not function in reality. Although the situation improved after the 1950s the problems continue even nowadays. The absent of an efficient state apparatus and welfare forced many Greeks to look in family ties in order to secure their future. Among all cross-cultural literature, perhaps the most often-cited and the most widely accepted one is Hofstede's (1980, 1991) five dimensions of culture. Hofstede's main finding is that national cultures can be compared along five dimensions that are largely independent of each other, namely: Power Distance, Uncertainty Avoidance, Individualism versus Collectivism, Masculinity versus Femininity, and Long-term versus Short-term Orientation (Hofstede, 1991). Power Distance is a cultural trait which defines the inequality across social classes and the degree / level which the society accepts this inequality as normal. The Uncertainty Avoidance characteristic demonstrates the level of risk-averse of a society. It demonstrates to what extent individuals take risks how they face unpredictable situations etc. The third trait, Individualism versus Collectivism, demonstrate cultures where the individual is the epicenter of activity, action and responsibility, viz. a. viz. societies which perceive collective activity as essential. The fourth element (role of sexes) is associated with certain social roles for men and women, which have economic ramifications.

[115] Data obtained from the Greek daily economic newspaper Imerisia 12-13 October 2013.
[116] Data obtained from Greek statistical service April 2013 monthly bulletin report
[117] See: data obtained from the Hellenic Banking Association and the Bank of Greece (monthly statistical bulletin).

Thus in the traditional societies women are not part of the labour force. Their role is mainly focused in domestic in house activities as housewives. In these societies men compose the greater part of the labour force. Other traits occur in less masculine cultures where the role of women is greater. The final dimension is Long-term versus Short-term Orientation. This dimension relates to people's view towards time. In cultures with long-term orientation, people usually spend a lot of time in considering all aspects in detail before making a decision. In short-term orientated cultures however, people usually make quick decisions and expect rapid responses. In this dimension, one set of values (the positive pole) are oriented towards the future, like thrift and perseverance. On the negative side, values are oriented to the past and present, like respect for tradition and fulfilling social obligations. Greek culture was (and remains) family oriented; thus Greece remains a traditional society. This, creates obstacles to economic development. The fact that Greeks are risk averse and family oriented answers the question why entrepreneurs avoid risky investments and why labour force does not easily adopt to new circumstances in the labour market (i,e, low labour force volatility), especially if there are family ties (this however does not apply to the young generation university graduates).

4. The above analysis demonstrates that Greece's economic problems are not only associated with economic policy errors. These occurred certainly; however the economic problems of the country are associated with its history and culture. Of course history cannot change and cultural change can occur instantly, since this is a time consuming process and needs a big time horizon. The aim of the paper is not to justify Greek economic evolution; but to make certain that in the Greek case is very special in Europe. Those who easily blame Greece for all ills they can stick to their attitude in a free globalised world; however they have to know the facts and the causes of Greece's failure. When conducting economic policy it is helpful to remember the Aristotelian assertion: "The gravest injustices are never done by those in distress, but by those who go to extremes". This applies to both the supporters of the austerity programme, as well as to those who oppose austerity. Attempting to repay debts by constant austerity is not a long term solution. On the other hand attempting to finance debt via quantitative easing and excess money supply does not work in the long term either. We must also remember Keynes: "in the long term we are all dead".

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