ECONOMIC EXAMPLE-MODEL ON THE FORMS OF CAPITAL ACCUMULATION IN THE TURKISH ECONOMY

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Abstract: In this article we shall present the Turkish economy, and more specifically the Turkish economic growth, in financial terms. Firstly, we shall briefly refer to the five forms of accumulated capital in the Turkish economy. By quoting an economic model, which is based on the theory of economic growth — a theoretical fabrication originally expressed by Harrod and Domar (Harrod and Domar economic — growth model) and later on by Denison and Solow (Denison and Solow economic — growth model), the various “constituent” forces — parameters which contribute to the accumulation of capital and eventually to the economic growth of Turkey (“resultant” force) will become more comprehensible.

In today’s Turkish economic reality various forms of accumulated and constantly increasing capital coexist, which should firstly be analysed theoretically and concisely, so that they become absolutely comprehensible in terms of their significance, their interconnection and their expressions.

Firstly we make a distinction between the Islamic or green [1] capital on the one hand and the kemalic capital or military — bureaucratic capital on the other, as they were formed in the modern Turkish political and economic history.

1 Green is a symbolic colour in the Religiology of Islam, because it represents the beginning of the Holy War of Muslims against the infidels, which is called “Jihad”. For the semantics of the term “green” in the Islamic culture and theory also see Oran V. (2001), “Kemalism, Islamism and Globalization: A Study on the Focus of Supreme Loyalty in Globalizing Turkey”, Southeast European and Black Sea Studies, Vol. 1, No. 3, 20-50, p. 45.
Capitalism in Turkey is split into two different forms, with distinct mentalities and textures: the Islamic and kemalistic capitalism. A mainly political juxtaposition smoulders among them, due to the different political bases they stand on and which they draw their strength from, and the distinct political and economic aims that each one serves. Practically however, due to the more general economic and socio-political conditions as well as certain particular factors prevailing in Turkey today which co-shape the country’s future course and prospect, the following five types of accumulated capital have been created in the Turkish economy of today:

1. The Kemalist or military – bureaucratic capital which the Turkish mostly military companies and defensive industries come under, for example, the Turkish Army Solidarity Institution (Ordu Yardımlaşma Kurumu, O.Y.A.K.), though which the Turkish armed forces perform their business activities. The O.Y.A.K. controls the production of military and martial material (of an enormous economic value), and even entire car industries, while it simultaneously also participates in the Istanbul Stock Exchange [2] as a shareholder. This particular form of capital is supported by Turkish Industrialist's and Businessmen's Association, which in Turkish but also internationally is called TÜSİAD (Türkiye Sanayici ve İş Adamları Derneği). The particular business Association finances and is financed by Turkish government military bureaucrats as for example diplomats of the Turkish Ministry of Foreign Affairs, judges, higher and senior officials, rectors of Academic Institutions, the majority of the hierarchically inferior state officials of Turkey, high-ranking military officials and Kemalist ideologists [3].

2. The Islamic or green capital which includes Turkish enterprises, managed by Islamists or businessmen with Islamic ideologies and ideologists of the Islamic religion. Representatives of the large Turkish capital belong to the Islamic capital, as for example the Turkish heavy industries of various production fields, the oil exporting and refining companies such as TÜPRAŞ, the manufacturing sector, the Press groups, construction companies etc. The business representatives of this type of capital formed a dynamic, national, middle class which was created in

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2 For a more complete analysis of the role of the military – bureaucratic capital and the defensive – military industries and groups in the economic life of Turkey see Incel A., Bairamoglu A., The Turkish Army. A political party, a social order, Vivliorama Editions - (Ἰνσέλ Α., Μπαϊράμογλου Α., Ο Τουρκικός Στρατός. Ένα πολιτικό κόμμα, μια κοινωνική τάξη, Εκδόσεις Βιβλιόραμα), Athens, 2007, p. 223-267.

3 For more information see http://www.tusiad.org.tr.
Turkey after the 1930’s; it gradually acquired political power, it was politically expressed by the various Islamic political parties – formations, particularly by the Justice and Development Party (Adalet ve Kalkınma Partisi, AKP) and has important economic influence; As a consequence of the above, it seeks its total disengagement from the kemalists – and has achieved it to a large extent nowadays. Recep Tayyip Erdoğan himself participates in the Boards of Directors’ of large Turkish companies and companies of Islamic interests, such as Ülker. However, other powerful politicians also have business activities in Turkey. The MÜSIAD Organisation (Müstakil Sanayici ve İşadamları Derneği) is the organised business arm of the Islamic capital of Turkey, which numbers more than 7000 companies as members [4].

3. The capital that springs from and is shaped by the large Turkish conglomerates and holdings eg. Koç Holding, Sabancı Holding, Doğan Holding, Karamemehmet Holding, Ören (Ihlas Holding), Zorlu Holding, Anadolu Holding, Çukurova Group, Sabaz Holding, Haz Holding etc. These groups maintain very close relations with every government in power, but also with the political parties which play a leading role in the political chessboard of Turkey in general. Certain groups represent exclusively Islamic political and financial interests, like the Karamemehmet group, while its opposing force is the Koç group, which is driven by the kemalic ideology and principles, because in the group’s initial creation stage Koç was offered the undivided support of Mustafa Kemal himself, thus acquiring important interconnections with the Turkish army and offering its enterprising contribution in the Turkish defence industries, obtaining enormous economic profits and privileges.

4. The capital that is created by the outlaw – illegal activities of the Turkish grey economy such as drug trafficking (mainly opium), weapon trafficking, white slave trade (trafficking of women), prostitution etc. and constitutes a remarkable percentage of the Turkish G.N.P., whose percentage point contribution is of course not possible to be accurately calculated.

5. The foreign capital, which flows into the country:
   
   - either as foreign financial aid eg, loans from the European Union (E.U.), the International Monetary Fund (I.M.F.) and the World Bank, as well as various subsidies – grants for specific fields or sectors of the Turkish economy.

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4 For more information see http://www.musiad.org.tr.
or as Foreign Direct Investments (FDI) which take place in Turkey from foreign countries, which foresee economic surplus values and satisfactory to high returns on investments in various fields of the rapidly developing Turkish economy and particularly in the secondary and tertiary sector (heavy industry, manufacturing, services etc.).

The main contribution of the present article lies in the economic model that will be used in order to describe the Turkish economic growth, but also in order to scientifically justify the theory of the “communicating vessels”. According to this theory which the writer develops, with the use of the economic model in question, the powerful economic, political and military interconnection between the U.S.A., Israel and Turkey is supported and scientifically proven; to a great extent, this interconnection moves the political and economic threads in the broader region of the Eastern Mediterranean, of the Balkans and Hypercaucasia, by influencing the various developments that take place in the regions previously mentioned. The final goal of this “special relation” between these three states is on the one hand to serve U.S.A.’s and Israel’s political and economic interests in the sensitive regions of the Balkans (particularly in the economies of the New Europe) and of the Middle East, and on the other hand to promote Turkey to a regional economic and political power, which shall play a leading role in the various and multifunctional political and economic developments. This “special” relation and the overall project and the individual objectives that are sought to be achieved with the rational application of the “communicating vessels’” theory are supported significantly by Great Britain, which offers its assistance to the U.S.A. and Israel, because it perennially foresees economic and political interests in the regions of the Eastern Mediterranean and the Balkans.

More specifically, first we shall explain the various endogenous and exogenous variables that shall be presented in the model.

Therefore,

- TD: Turkish development (endogenous variable)
- IC: Islamic capital (endogenous variable)
- MBC: military – bureaucratic capital (endogenous variable)
- FFA: foreign financial aid and Foreign Direct Investments (F.D.I.) in Turkey (exogenous variable)
- UF: unexpected or random factors (e.g. Financial crises – recessions, foreign exchange or oil crises, stock exchange rises or falls, international crises etc.)
- L: Turkish labour, labour force (endogenous variable)
- T: time or technological advancement (endogenous variable)
It is pointed out that the sum of \((IC + MBC)\) constitutes the entire Turkish capital \((TC)\), in which we do not include any exterior help, financing etc. Additionally, we should mention that the variable nature or land \((NL)\) is not included in the present model only for reasons of simplifying it. Moreover, in most economic growth models the variable in question is omitted in the analysis carried out.

**General Model:** \(TD = IC + MBC + L + T + FFA + UF\)

Model specialized on the Turkish economy:

\[
TD = a + b + c + d + L + T 
\Rightarrow
TD = a(1 - C) + bC + c_1(1-A) + c_2A + d + L + T \tag{1}
\]

where:

- \(C\): total Turkish capital (internal)
- \(A\): foreign financial aid and Foreign Direct Investments (F.D.I.) in Turkey (external)
- \(c_1\): foreign financial aid (eg. European Investment Bank) and Foreign Direct Investments (F.D.I.) in Turkey from the European Union.
- \(c_2\): foreign financial aid (eg. World Bank, International Monetary Fund etc.) and Foreign Direct Investments (F.D.I.) in Turkey from the U.S.A.

By differentiating the relation (1) as for the variable \(T\), we have:

\[
dTD/dt = \theta[a(1-C)]/dt + \theta(bC)/dt + \theta[c_1(1-A)]/dt + \theta(c_2A)/dt + \theta d/dt + \theta L/dt + \theta t/dt
\]

The model – theoretical fabrication of Harrod and Domar considers growth [5] is a result only of capital accumulation, thus totally excluding any effect technology and technological progress could have on economic growth. On the other hand, the Denison and Solow model has been developed, which takes into consideration both the effect of labour and capital, and the contribution of technology and technological change on economic growth having “growth accounting” as its foundation. Driven by the Denison and Solow model on the economic growth of an economy, we can distinguish the contribution of various factors in Turkey’s economic growth [6].

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In particular, we assume the model $Y = F(C, L, T)$,

where:

- $C$: the total Turkish capital
- $L$: the total Turkish labour force
- $T$: technological advancement

By differentiating as for $T$ we have:

$$\frac{dY}{dT} = \left( \frac{\theta F}{\theta C} \right) \left( \frac{dC}{dT} \right) + \left( \frac{\theta F}{\theta L} \right) \left( \frac{dL}{dT} \right) + \left( \frac{\theta F}{\theta T} \right) \left( \frac{dT}{dT} \right)$$

By dividing by $Y$, and by developing the two first terms on the right, we are given the following:

$$\frac{(dY/dT)(1/Y)}{Y} = \left( \frac{\theta F}{\theta C} \right) \left( \frac{C}{Y} \right) \left( \frac{dC}{dT} \right) / C + \left( \frac{\theta F}{\theta L} \right) \left( \frac{L}{Y} \right) \left( \frac{dL}{dT} \right) / L + \left( \frac{\theta F}{\theta T} \right) / Y ,$$

where:

- $(dY/dT)/Y$ is the growth rate of the total Turkish output ($g$)
- $(dC/dT)/C$ is the growth rate of the Turkish capital ($g_c$)
- $(dL/dT)/L$ the growth rate of the Turkish labour force ($g_L$)
- $(\theta F/\theta C)$ stands for the marginal product of the Turkish capital ($i$)
- $(\theta F/\theta L)$ stands for the marginal product of the Turkish labour ($w$)
- $(\theta F/\theta C)(C/Y)$ stands for the share of the Turkish capital in the Turkish national output ($\omega_c$)
- $(\theta F/\theta L)(L/Y)$ stands for the share of the Turkish labour in the Turkish national output ($\omega_L$)
- $(\theta F/\theta T)/Y$ stands for the share of the increase in the Turkish output (G.N.P.) that is not explained by the increase of the Turkish factors of production (labour and capital). It constitutes that is, the more efficient Turkish production ($q$)

Therefore,

$$g = g_c \omega_c + g_L \omega_L + q + FF \quad (2)$$

where:

- $FF$ is the total of external – foreign capital (except the Turkish ones) that flow into the Turkish economy as foreign financial aid (World Bank, I.M.F. European Investment Bank etc.)

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*Civitas Gentium* 1:1 (2011)
The sum of the two mathematical products \( g_C w_C + g_L w_L \) constitutes the share of the increase in the Turkish product (G.N.P.) that is explained by the increase in the factors of production (labour and capital). This concerns the growth realised by the factors of production which Turkey self-dependently disposes without any exterior, material or financial aid. This share of Turkish growth marks a rapid increase during the last decades, a fact primarily due to the rise of industrial production and the improvement of working terms - conditions in the secondary and tertiary sector of the Turkish economy.

Relation (2) can also be written more analytically as follows:

\[
g = g_C w_C + g_L w_L + q + WB + IMF + EIB + LOB
\]

(3)

where:

- WB stands for the financing inflows from the World Bank
- IMF stands for the financing inflows from the I.M.F.
- EIB stands for the financing inflows from the European Investment Bank
- LOB stands for the financing inflows from the various lobbies activated outside Turkey such as the Turkish lobby of the U.S.A., the “American friends of Turkey”, the American-Jewish lobby etc.

The basic conclusion arising from the above analysis firstly concerns the various internal interconnections of the national, Turkish capital with endogenous factors that co-form Turkey’s entire economic capital (eg. kemalic, Islamic capital, capital of the large conglomerates and holdings etc.), and secondly the exterior interconnections of the national, Turkish capital with the international, globalised economic capital (eg. Capital flows from international economic organisations, the E.U., U.S.A., various lobbies etc.). The five types of capital previously mentioned recommend the five constituents that lead to their common resultant which is the accumulation of capital in modern Turkey. This accumulation is characterized as a constant, continual and increasing one, particularly during the last years, after the rise of Tayyip Erdoğan’s Islamic party (AKP) to power in 2002. The stable economic policy it applies consists in an effort to stabilise the economy in macroeconomic terms, to tame inflation and unemployment, to reduce deficits and public debts, and to gradually increase the F.D.I. in the Turkish territory and cease Turkey’s dependency on foreign countries’ energy reserves (eg. oil, natural gas etc.).

From an economic standpoint, it is made certain through the model which was used that a continuous economic growth of Turkey both in terms of growth rate and time frame requires both capital exposure investments as well as capital intensive investments. The continuous technological advancement
that the Turkish economy demonstrates primarily over the recent years, consists in the adoption of new and pioneering methods and production techniques for the products and services it produces, as well as in the advancement of the new product and services development process. Moreover, the technological development contributes decisively to compensate the relation between the Turkish capital and its declining return, based on the fundamental economic law of decreasing rate of return, as the available reserve of the Turkish capital is constantly increasing.

It would of course be sounder and scientifically documented if we could separate with numerical data and calculate the contribution percentage of the Islamic and military – bureaucratic capital to Turkey’s economic growth (eg. marginal product and marginal efficiency of the Islamic and military- bureaucratic capital), so that we are fully aligned with the requisitions of the economic theory as well. This is considered to be unattainable, because no similar studies have been carried out by Turkish or international centres or institutions of economic studies, while even the writer’s efforts to gather this material led to failure due to the difficulty to locate appropriate scientific evidence. Additionally, we could establish the effect of the two types of the Turkish capital in terms of trade, in the conduct of monetary, fiscal as well as exchange – rate policy. However, these issues do not fall into the scientific content of the present article, but may constitute future scientific – research activities.

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