

# Total national debt and economic growth

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## Abstract

The debt crisis in Europe has raised several questions about the future of Euro. However public debt is not the only one. Total national debt includes debt of households, businesses and financial institutions. How much debt can an economy afford? Is there any optimum level of debt within an economy? Do we have to change our way of living because of debt? And how is debt connected to economic growth? This paper will try to give some answers to these questions.

The paper is based on data collected for several developed and developing countries. A analysis is performed to see the connection between total national debt and economic growth level.

Key words: *debt, economic growth, financial institutions, GDP, financial sector*

# 1 What is total national debt

The European economy has actually sunk in a crisis that has the origin in the problems of some of the members of the European Union have with their budget deficits and debt. This has been often called a debt crisis, often meant as the public debt crisis. There is a large debate on how to manage public debt, which may in the future bring to new paradigms, theories and also new institutions in the public finance world.

But it is very unlikely that debt in an economy should be an issue only for the government and the public sector. Everyone from the major actors in the economy is somehow and somewhat indebted. Families use debt to improve their lives and businesses use debt for investment or working capital. The financial sector which serves as an intermediary also uses leverage to make profits. So debt is part of our everyday life and has been so for many centuries. And even when it becomes a problem, it is often a problem for all the actors of an economy, not simply for one of them. We are in the middle of a debt crisis but is it just a problem of bad public management or is it a problem of our way of living, which has gone beyond possibilities? The issue risen in this paper concerns mostly with what is called total national debt.

If you search for national debt in the literature you will often find papers concerned with just what we know as public or sovereign debt. Total national debt in fact is much more. It also includes debt of households, private sector and the debt of the financial sector. Each of these kinds of debt shows something about the way the economic actors are “playing”. A high level of debt from households means they are increasing actual consumption and probably forecast better times and revenues in the future. High debt from business usually is accompanied with higher level of private investments. In cases when public debt raises in higher levels, this maybe a sign of an expansive fiscal policy but also a sign of a bad fiscal management. Things differ with the financial sector, whose debt depends on its development, dominance and competition, and also from the general structure and size of the economy.

The first component of the total national debt is household debt. It includes all the debt of the families, mostly to financial institutions but also private debt. It is not that easy to be measured as debt for families may come in different forms such as loans, overdrafts, credit cards, due bills, etc. Household debt can be long term such as mortgage loans, but is mostly short-term. Household debt is bigger in developed countries, where wage revenues are also higher. In developing countries, where the level of GDP/capita is low it is often difficult for individuals to get loans, so this figure is quite lower. Normally a figure showing the total of loans accorded to individuals by lending institutions (including mortgages, consumer loans, credit card dues, etc) can be often used as a proxy for household debt. A large household debt can be a major problem as it means families are so much indebted that they can't afford more debt and have to lower consumption. Also it is a sign of future problem of the lending institutions regarding loans default.

Another important component is private debt, or the debt of the business. It takes many forms, practically every possible form of debt from securitized debt (bonds), loans from lending institutions, short-term debt, account payables (often called trade debt), and also private lending agreements. Most of the debt of businesses is long-term, as it is often used for investments and expansion. Usually when the long-term part of the businesses is growing it shows growth of investments and is accompanied by the falling of the unemployment rate. It is the growing of the short-term debt that is often a big issue as it may show a lack of liquidity in the economy. It may lead to a chain of debt in real economy, where businesses owe large amounts of money to each other in the form of accounts payable. The case of the construction sector in Albania is actually such a problem. In developed countries the level of private debt is also higher than that in developing countries, mostly because of better access in financial markets and in the funds from the banking sector. The total of the bonds issued by corporations and the loans accorded to businesses from lending institutions is often used as a proxy for private debt. This leaves out debt that comes from everyday operations like account payables, however, as we mentioned above, it is the long term debt that counts for the major part of private debt.

Public debt is the third component and probably the most problematic one. If families borrow to improve their living and businesses borrow to boost earnings and profits, the government often borrows because it can't afford expenses to fulfill its duties and obligations. Public debt as known can be long term or short term, domestic or foreign (household debt is always domestic and business debt is mostly domestic). It can be exactly measured and is mainly composed from securities (T-bills and bonds), loans from financial institutions or other countries and in smaller quantities by account payables. Government figures of public debt are regularly and periodically published in most countries. As we said, public debt growth may not always be a bad sign, although often public debt growth is connected to bad fiscal management. It may be also a part of an expansive fiscal policy, trying to boost the economy. Developing countries count for more public debt as developed countries. This debt can often suffocate a developing economy, especially if it is not used for investments, but just for momentum expenses.

The last component of total national debt is that of the financial sector. It depends from the size and structure of the financial system of a country. It is pretty normal for financial institutions such as banks, to have debt as their major financing source. But often debt is used not to finance normal or traditional operations, but also speculation and derivative trading strategies, which may result in huge losses. Most of the debt of financial institutions is long term, and mainly domestic. Large multinational actors also have big quantities of foreign debt. Usually a strong financial sector has larger size and also larger debt, and this is characteristic of developed economies. In small developing countries the size of the debt of the financial sector is much smaller and less diversified.

## 2 Literature review on debt and economic growth

Many authors have dealt with the problem of debt impeding economic growth. It is logical that a big amount of debt brings bankruptcy for every economic actor (household, business, government). But which is the level that should not be trespassed to avoid slowing down economic growth?

Regarding public debt there is a general consensus that the level of debt/GDP over 90% leads to fall of economic growth. Reinhart & Rogoff (2010) find that below the threshold of 90% the relation of public debt to economic growth is weak. If the threshold is passed, median growth falls about 1% and average growth rate falls more. Another important consideration of these authors is the fact that the threshold is considerably lower for emerging markets debt denominated in foreign currency, at about 60% of GDP. Presbitero (2011) has studied the effect of all public debt (domestic and foreign) in developing countries and gave almost the same threshold level, at about 90% of GDP as a limit for debt to impact negatively on economic growth. An important issue regards the capacity and ability of the country to manage debt, developing countries with better debt management can reach higher levels of public debt without negatively impacting GDP growth. Cechetti, Mohanty & Zampolli (2011) pose the question for all types of debt, except for that of the financial sector. They studied the data only for OECD countries and found similar results for the all kind of debts at about 85-90% level of GDP. According to their study a government debt of above 85% of GDP impacts negatively economic growth. They find the same threshold for household debt, although they do not claim precision estimate. For private corporate debt the threshold found is at 90% of GDP. As we may see, in general studies show that public and private debt, except for the financial sector, should not pass the limit of 90% of debt/GDP if we don't want to have negative effects on growth.

There are no clear results about the level of debt of the financial sector. As we mentioned above, the financial sector level of leverage depends mostly from the size, organization and country characteristics. Major economies, which have large financial institutions that are often multinational and serve as large financial centers, do often present very high levels of debt in the financial sector, but they have often performed well. While small developing countries may have low levels of debt of the financial sector and still have bad economic performance. However there is some discussion regarding the use of leverage from financial institutions to boost earnings through speculative strategies and involvement in derivative trading. Most of the losses in recent financial scandals have come in this way.

## 3 Debt trends in major economies – the process of deleverage has started

A study made by McKinsley (January 2012) show the situation of the debt in

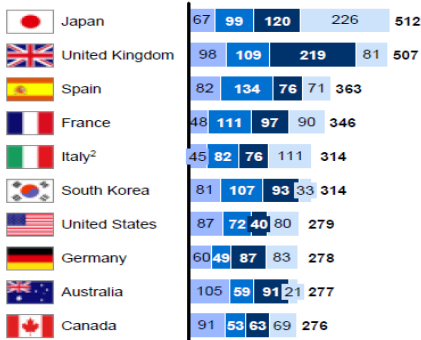
some major world economies and also in the European countries that are actually in economic and financial crisis (the also called PIIGS – Portugal, Italy, Ireland, Greece, Spain). It is scaring to see figures like 500% ratio of debt to GDP for countries like Japan or UK, however this is mostly due to large debt of the financial institutions, with London and Tokyo being the biggest financial center in Europe and Asia. With few exceptions the levels of individual components of national debt rarely pass 90% (see for example US economy) and the composition of total national debt can tell us many things about the structure of the economy and the possible sources of the economic and financial crisis in different countries.

It is interesting to see the composition of debt in the European countries that are part of the crisis. Greece and Italy present high levels of public debt and their crisis is mostly a public finance one. The situation of Spain and Portugal is different. Their public debt is moderate, but they have a very high level of private corporation debt. This is due to the expansion of credit during the global credit boom in last decade. Spain saw interest rates fall when entered in Euro and this gave start to a new credit expansion and a “bubble” in the real estate market. Same thing has happened also in Portugal. The situation is very difficult in Ireland, which has problems also with the debt of households and financial sector.

### The composition of debt varies widely across countries

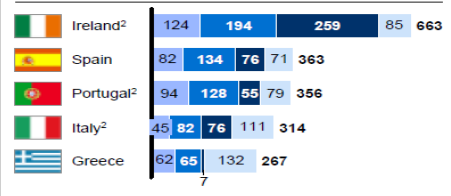
Total debt,<sup>1</sup> Q2 2011  
% of GDP

#### 10 largest mature economies



Households  
Nonfinancial corporations  
Financial institutions  
Government

#### Eurozone-crisis countries



<sup>1</sup> Includes all loans and fixed-income securities of households, corporations, financial institutions, and government.

<sup>2</sup> Q1 2011 data.

NOTE: Numbers may not sum due to rounding.

SOURCE: Haver Analytics; Bank for International Settlements; national central banks; McKinsey Global Institute

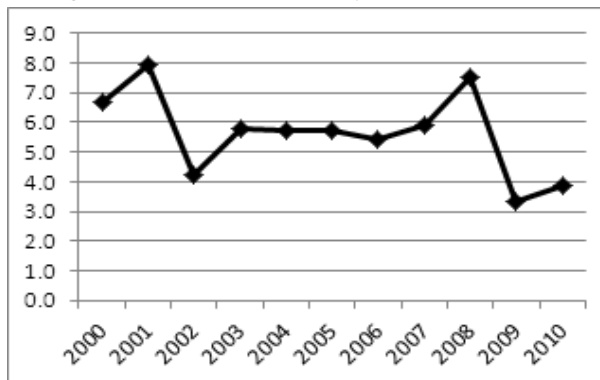
Recent data show that a process of deleveraging has started in major world economies. This is a normal reaction in time of crisis. Household lower consumption and the first things to be “cut off” from the family budget are those that are bought by credit. The real estate market has worsened in many countries as the real estate bubble exploded. Before the start of the crisis many of the economies were characterized from high growth in private debt (household and business) and relatively very low growth of public debt. This was more due to the quick expansion of the real estate market

(especially the housing market). When recession started, many major economies gave the first signs of deleverage in private debt. Companies and household stop borrowing. Public debt start to grow as the government tries to boost economic growth through public expenses or tax cut-offs. The other stage of the process is the most problematic, private sector deleverages while public debt grows heavily. This may be the case of some European economies, such as Spain or Italy. The main problem in this stage is not to go far with public debt so it can impede further growth. But also the governments try to intervene through fiscal policy by raising public expenses or cutting off taxes. If they do not intervene at all this may lead to a very long recession spiral. Intervention of monetary authorities may be distorted by the fact that high levels of private debt deter the expansion of new credit even if interest rates are lowered sensibly. The final stage of this process is where the economy gives signs of recession ending and starts expansion. Private sector starts to have high debt growth, public sector deleverages. Although for many European economies this stage seems far away and austerity time has come, this is a process that has happened before during times of credit crisis and will happen again. Political intervention is of crucial importance to avoid defaults and to help private sector recover quickly. Governments should try to focus not only in fiscal reforms, but also to try to improve private investments through various incentives and to stabilize the banking system and the real estate market.

## 4 What has happened in Albania

### GDP growth

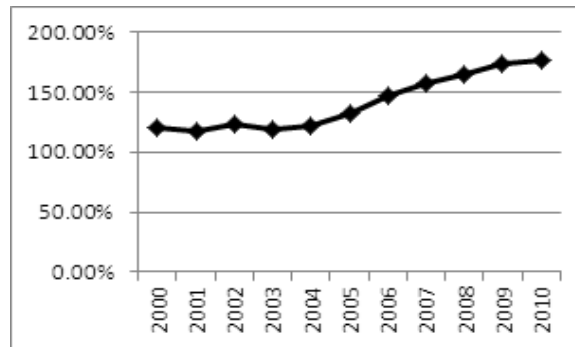
Economic growth in Albania has been stable for many years. After 2008 there has been a significant fall of the economic growth, mainly due to the effects imported from the crisis in neighbor countries, especially Greece.



### Total debt to GDP

This figure has grown constantly through years, especially from 2004 and afterwards. This is because of the fast expansion of the banking sector in the last years.

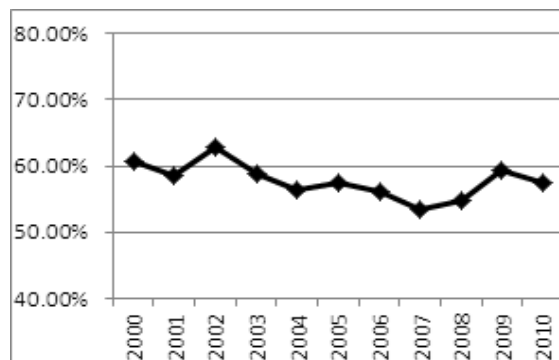
Actually total debt to GDP is at about 177%



In order to calculate total debt we have taken into consideration the public debt, the loans for individuals as a proxy for household debt, loans for businesses as a proxy for private business debt and the total of liabilities of the banking system as a proxy for the debt of the financial system. These proxies are good estimations of real debt as there is no debt securities issued in Albania by the private sector such as bonds, notes, or other type of debt, and also the banking sector is the absolute dominator of the financial system.

### Public debt to GDP

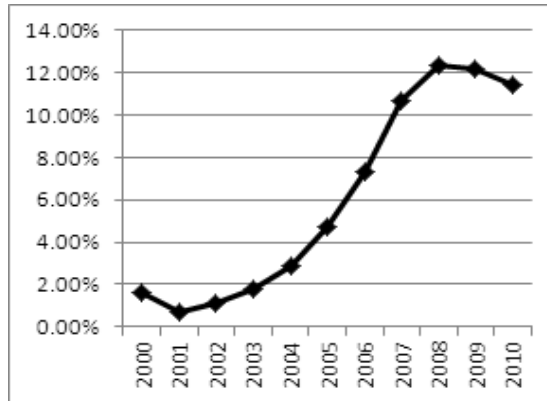
The ratio of the public debt to GDP has been stable to the 60% level. Governments in Albania have been careful not to go far beyond with the debt. The good thing is that the debt is mostly domestic, although there is a tendency for a growth of the foreign debt share in the last years. Also there is a tendency to issue debt denominated in Euro. The problem with these figures reported by the government is that they do not include the unpaid bills of the Government, a figure that has grown up recently.



### Household debt to GDP

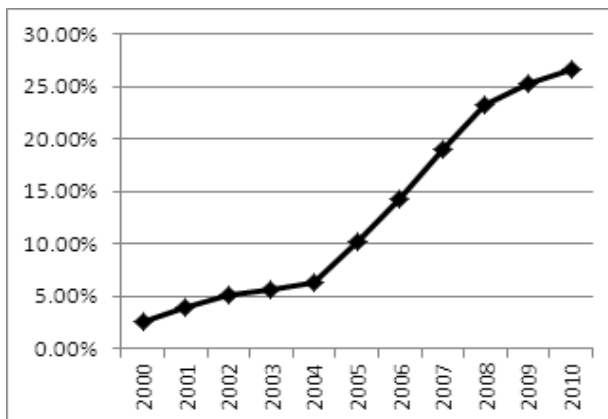
This ration has presented an exponential growth during years from 2001 to 2008.

This period has been a period of expansion of credit. Still total debt of households to GDP remains small not passing 12%. The interesting phenomenon that has been noticed in the last 2-3 years is that probably deleverage started in the household finances. Credit for individuals and families has grown little and also data from the Bank of Albania show a lower consumption in the last months. This is a sign that a process of reduction of debt because of bad expectances for the future has started.



#### Private sector (non-financial) debt

From 2.5% of GDP to almost 27% of GDP in a decade, this is probably the debt component which has figured the biggest growth. After 2004, we can see a strong constant growth that matches with the expansion of the credit from the banking system. Although the rhythm of growth has decreased in the last years, the ratio continues to grow, a sign that there is still demand for credit and investments in the private sector.

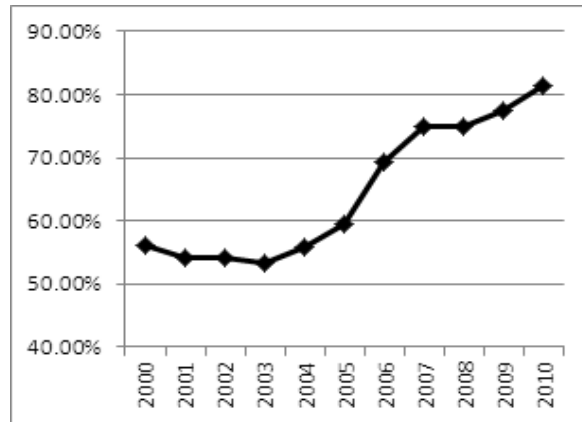


#### Financial sector debt to GDP

Similarly to the other two components the debt of the financial sector has grown up in the last decade. Growth has been fast during the period



2003-2007 and has slowed down later, with a negative growth in 2008. However in the last two years there has been again a growth of the liabilities of the financial system passing the threshold of 80% of GDP.



## 5 Data analysis and conclusions

From the data we presented in the section above we can perform an analysis and draw some conclusions. *First*, correlation between economic growth and total debt (as well as to any of its components) is not statistically significant. This is comfortable with the existing literature because of the actual debt levels far below from the “limit” thresholds in Albania. *Second*, as we said debt in Albania is still far from empirical possible thresholds, but we need to take in consideration “unofficial” debt. This includes business debt that is not taken from the banking system, and also the “debt chain” of account payables in various sectors of the economy, especially in the construction sector. Also as we mentioned there is a growing figure of unpaid bills from the public sector (central and local) for services that have already been delivered. *Third*, credit expansion certainly is slowing down, but shall we expect deleverage in the private debt (business)? In the last years private sector debt has grown but the effects of the debt chain or lack of liquidity may impede new investments and growing of credit for the economy. Fourth, the financial sector in Albania has passed the stage of quick growth and is going towards maturity, especially the banking system. This means we expect to have constant levels of debt to GDP ratio for this sector in the years to come. Albania has not an active financial market, so there is little chance that financial institutions will issue debt or use leverage to earn profit from strategies involving trading of securities.

## 6 References

Bank of Albania, *Annual Report 2011, Statistical Report January-March 2012*.

Chechetti S. Mohanty M. Zampolli F.; 2011, *The real effects of debt*.

Mc Kinsey Global Institute; 2012, *Debt and deleveraging; uneven progress on the path to growth*.

Ministry of Finance of Albania, *Data figures on Budget and the Fiscal Statistics*.

Presbitero A.; 2011, *Total public debt and growth in developing countries*, working paper.

Shabbir S.; 2010; *Does External Debt affect Economic Growth*, working paper.