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## Greek Debt Crisis: The "@-euro" a New Possible Solution to Greek Debt Crisis

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**Greek Debt Crisis:  
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Greek Debt Crisis**

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**Statistics**

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**Greek Debt Crisis:  
The “@-euro” a New Possible Solution to  
Greek Debt Crisis**

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**ABSTRACT**

We introducing the new idea, of “@-euro” is a self-part-financiering monetary policy. This new idea, introduced more money (liquidity) to Greek state, and a system to collect taxes from the black economy. This idea, which is a possible solution to the Greek Crisis applied in a 7-years alternative Budget. The “@-euro” has two characteristics, first self-financiering and self-discipline. The produced New MTFS with exceptional positive results, with 43,00 billion surplus after that we have pay 113,00 billion Euro back to the creditors in a 7 year period. Moreover, no negative effects of austerity. There is fiscal stimulus without inflation!

Keywords: Austerity, Government Budget, “@-euro”

**JEL Classification**: C22 E62 F33 H63 O40

**1. Introduction**

The high government structural deficits from 80’s until today accumulated the high Greek Government debts. We know today, that the strong rise of interest rate spreads for government bonds, as a result of investor concerns about their future debt sustainability increased the need and demands for bailout program.

We know also, that a group of bailout creditors was formed and “The sovereign bailout programs”, was constructed and delivered to Greece in two faces. The European Commission, the IMF and ECB, that goes with the nicknamed "The Troika", jointly representing the bailout creditors.

So a big bailout program for Greece constructed, but “*austerity*” measures are prerequisite for bailout program to be delivered. 2010 a *memorandum* (MNHMONIO) we sign by the Eurozone countries and Greece there the austerity measures are formed.

All these is history now, the internet has all the information's that you need about the Greece and Greek government-debt crisis. You can read in details even in “Wikipedia”.

While Mantalos (2015) traced the historical way of the Greek Debt and studied the effects that “*austerity*” measures had on 7 measurements of Greek economy by using the principle “Let's Data Speak” without political analysis. The negative effects of this austerity policy are great for the Greek Economy; almost 25% of the Greek state's wealth was disappeared in 4 years.

Any way because the creditors are demanding budget discipline from Greek government, the previous Greek government to show the austerity disciplinary measure was published the Medium Term Fiscal Strategy 2012-2015. However, as we see with this austerity policy made harder the already difficult situation for the Greeks. Result of this is that the new Anti-austerity Greek government is seems to see things we another way than the Troika see.

Now let's see the problems that today face the Greek government: First are the austerity effects, second is the acute liquidity problem for the Greek government and third the increasing loss of taxes due to austerity policy, that is, loss of taxes from the hidden, black economy.

So what we want is more money (liquidity), and a system to collect taxes from the black economy.

Is any possible solution? The answer is YES! And we try to develop in this paper the new idea to get out of this dead way. So the name of the answer is the “@-Euro”, that we are going to explain later in this study.

So in the next chapter we are going to see in short the Monetary Policy while this new idea, which is a possible solution to the Greek Crisis, the “@-euro” a self-part-financiering in the chapter 3. In chapter 4 we are going to see the previous Greek government’s Medium Term Fiscal Strategy 2012-2015 and based on that we are going to applied ,the introducing in chapter 3, our new the “@-euro” a self-part-financiering idea. Finally we make summarize and conclusions in chapter 5.

## **2. Monetary Policy**

Today’s Monetary Policy is nothing more than the actions that a Central Bank takes to control a country's money supply. How? The answer is, by setting the *interest rates*. If the central bank decreases the interest rates, it supposed to increases the supply of money by easing the availability of credit.

And this should promote economic growth with the same time possible in long term of increasing inflation.

On the other hand, if the central bank wants to reduce the level of inflation, may adopt a restrictive monetary policy by setting high interest rates, which constricts credit and slows or eliminates growth while reducing inflation.

This works well in theory and perhaps in healthy and well working economy. But for Greece is not so easy. First is not the Greece Central Bank that has the roll of money supplier, it is the Governing Council of the European Central Bank (ECB) that has this roll.

Then for repay the government debts Greece needs the yesterday’s Monetary Policy “ The printing Money Principle”. But this can’t happen in Eurozone. So to use this principle we need “Grexit”, that is, for at Greece to be able use this system has to use a “New Drachma”. Moreover the printing of money especially to repay the debts is always causes inflation and it should be the last resort for Greece.

For that reason, we introducing here a new idea, the “@-euro”, a system that could help the Greece to recovery.

## **3. The @-euro.**

We can describe the system as a part of yesterday’s monetary policy in today’s monetary system. In this chapter we will describe this simple new idea the @-euro.

Consider for a moment that the Central Bank of Greece on behalf of the Greek government can print 20 billion euros. This amount however cannot be used to pay the government debt but has the following properties.

- 1) It is used through a Debit Card.
- 2) Can be used only to the state territory.
- 3) Can be used as usually Credit card for all the today's electronic transactions.  
You can for example buy all the goods and services as you do in your day life but you can NOT take cash from ATM.
- 4) That is, **the @-euro, is money but not cash.**
- 5) The @-euro starts to be used by government for a part of payment of government's salaries but not as government's debt payment. With other words is used only as money for transactions. But after it's start can be used in the economy as the euro is used today. It generates taxes as the TVA for example. You can pay your electricity, your telephone, your apartments rent, your bus ticket etc., ...
- 6) It has start datum and 7 years life. That is, the Debit card expires after 7 year.
- 7) The whole amount after 7 years returns to Central Bank of Greece and disappears. But during this time, the individuals and business returns the @-euro to the government as direct, indirect taxes and social contributions.

### **Positive Properties**

Between the many positive properties two are that dominate first is, that is not expensive for the government and the economy in general. And second one, is a very big one, perhaps the biggest of all of achievements is that *counteract* to the hidden, black economy. Perhaps is the reducing of the overall Greek shadow economy.

Now it cannot be: ***“With receipt 50 euro without receipt 30 euro”***.

Everything is legal every transaction generates VAT taxes and because you cannot take out of the country or save in your mattress, don't forget it has a short life, returns soon to the government in form of taxes and social contributions.

### **Difficulties**

Negative properties we do not see direct. But it has a few difficulties. First we have to persuade the political authorities in Greece for this new idea. This can be possible but we think the greatest resist is from financial establishing world. There is no gain for the speculative institutes in that system. Of course is gain, in form that the Greek economy

will be healthy and the Greek governments as will show in our next chapter are able to pay the enormous debt in the very near future.

#### 4. The Greek government's (Maj 2012-Jan 2015) Medium Term Fiscal Strategy

The follow table 1 is based on Greek government published: "Medium Term Fiscal Strategy 2012-2015 without the 2015, and this because the January 2015 the Greece has change government.

Table Nr 1: Medium Term Fiscal Strategy 2011-2014

Greece Government Finance						Different
	in ml EURO	2011	2 012	2013	2014	2014- 2011
<b>Total Revenue</b>		<b>95,148</b>	<b>99,374</b>	<b>101,759</b>	<b>105,447</b>	<b>10,299</b>
<b>Indirect taxes</b>		<b>28,031</b>	<b>29,102</b>	<b>30,406</b>	<b>32,033</b>	<b>4,002</b>
<b>Direct taxes</b>		<b>15,541</b>	<b>17,273</b>	<b>17,653</b>	<b>18,648</b>	<b>3,107</b>
<b>Total Taxes</b>		<b>43,572</b>	<b>46,375</b>	<b>48,059</b>	<b>50,681</b>	<b>7,109</b>
<b>Social contributions</b>		<b>23,589</b>	<b>24,201</b>	<b>24,631</b>	<b>26,534</b>	<b>2,945</b>
<b>Transfers received</b>		<b>4,641</b>	<b>4,746</b>	<b>4,976</b>	<b>3,639</b>	<b>-1,002</b>
<b>Sales of Goods &amp; Services</b>		<b>2,163</b>	<b>2,518</b>	<b>2,409</b>	<b>2,442</b>	<b>0,279</b>
<b>Return on assets (incl. interest)</b>		<b>1,365</b>	<b>1,419</b>	<b>1,424</b>	<b>1,519</b>	<b>0,154</b>
<b>Other revenues</b>		<b>19,818</b>	<b>20,117</b>	<b>20,26</b>	<b>20,631</b>	<b>0,813</b>
<b>Total Expenditure</b>		<b>111,507</b>	<b>112,245</b>	<b>112,071</b>	<b>110,688</b>	<b>-0,819</b>
<b>Employees</b>		<b>20,496</b>	<b>18,718</b>	<b>17,774</b>	<b>17,058</b>	<b>-3,438</b>
<b>Operational expenditure</b>		<b>10,753</b>	<b>9,866</b>	<b>8,889</b>	<b>8,379</b>	<b>-2,374</b>
<b>Total wages and opex</b>		<b>31,249</b>	<b>28,584</b>	<b>26,663</b>	<b>25,437</b>	<b>-5,812</b>
<b>Social Transfers</b>		<b>52,514</b>	<b>51,406</b>	<b>50,319</b>	<b>49,369</b>	<b>-3,145</b>
<b>Interest</b>		<b>14,544</b>	<b>17,456</b>	<b>19,805</b>	<b>22,154</b>	<b>7,610</b>
<b>Other Expenditure</b>		<b>13,111</b>	<b>13,333</b>	<b>13,284</b>	<b>13,169</b>	<b>0,058</b>
<b>Balance</b>		<b>-16,359</b>	<b>-12,871</b>	<b>-10,312</b>	<b>-5,241</b>	
<b>GDP (in mn euro)</b>		<b>225,400</b>	<b>228,400</b>	<b>235,500</b>	<b>242,900</b>	

Based the new Organic Fiscal Management Law 3871/2010, The Greek government 2011 introduced the rolling Medium Term Fiscal Strategy Framework (MTFS).

The goal of the MTFs for the period 2012-2015 was to create a public sector that should be able to provide a state that can finance its own needs, a state without deficits and excessive borrowing needs.

As we see in Table 1, the last column the Greek government finance, should increase the Total Revenue with 10 billion and this by increase the Total Taxes with 7,1 billion and also by increase the Social Contributions with 2,9 billion.

In the same time by decrease the Total Wages with 5,8 billion and the Total Social Transfer with 3,15 billion could be able to Increase the Interest rates with 7,6 billion.

However, even if the deficits were decreased with 10 billion, were not eliminated.

Moreover the social cost was enormous as Mantalos (2015) showed, and had as result, the after 25 january 2015 elections, a new anti “*austerity*” Greek government.

Table Nr 2: **New Medium Term Fiscal Strategy 2015-2021**

<b>Greece Government Finance</b>							
in ml EUROS	2015	2016	2017	2018	2019	2020	2021
<b>Total Revenue</b>	<b>121,761</b>	<b>121,002</b>	<b>122,610</b>	<b>121,664</b>	<b>122,848</b>	<b>119,526</b>	<b>114,215</b>
Indirect taxes	30,406	35,406	36,501	38,001	39,001	39,001	39,001
Direct taxes	17,653	22,653	23,055	24,001	24,001	24,001	24,001
<b>"@-Euro"</b>		<b>-10,001</b>	<b>-7,501</b>	<b>-8,001</b>	<b>-8,001</b>	<b>-9,001</b>	<b>-7,495</b>
<b>Total Taxes</b>	<b>48,059</b>	<b>48,058</b>	<b>52,055</b>	<b>54,001</b>	<b>55,001</b>	<b>54,001</b>	<b>55,507</b>
Social contributions	24,631	24,631	25,501	26,501	27,501	28,501	28,501
Transfers received	4,976	4,976	4,976	4,976	4,976	4,976	4,976
Sales of Goods & Services	2,409	2,409	2,409	2,409	2,409	2,409	2,409
Return on assets (incl. interes	1,424	1,424	1,424	0,424	0	0	0
Other revenues	20,261	20,261	20,261	20,261	20,261	20,261	20,261
<b>"@-Euro"</b>	<b>20,001</b>	<b>10,001</b>	<b>7,501</b>	<b>4,001</b>	<b>5,001</b>	<b>3,495</b>	<b>0</b>
<b>Previous year pluss_minus</b>		<b>9,242</b>	<b>8,483</b>	<b>9,091</b>	<b>7,699</b>	<b>5,883</b>	<b>2,561</b>
<b>Total Expenditure</b>	<b>112,519</b>	<b>112,519</b>	<b>113,519</b>	<b>113,965</b>	<b>116,965</b>	<b>116,965</b>	<b>114,215</b>
Employees	20,496	20,496	20,496	20,496	21,496	21,496	21,496
Operational expenditure	10,753	10,753	10,753	10,753	11,753	11,753	11,753
<b>Total wages and opex</b>	<b>31,249</b>	<b>31,249</b>	<b>31,249</b>	<b>31,249</b>	<b>33,249</b>	<b>33,249</b>	<b>33,249</b>
Social Transfers	52,514	52,514	52,514	52,514	53,514	53,514	53,514
<b>Interest</b>							
<b>DEBDT reduction</b>	<b>15,555</b>	<b>15,555</b>	<b>16,555</b>	<b>17,001</b>	<b>17,001</b>	<b>17,001</b>	<b>14,251</b>
Other Expenditure	13,201	13,201	13,201	13,201	13,201	13,201	13,201
...							
<b>Balance</b>	<b>9,242</b>	<b>8,483</b>	<b>9,091</b>	<b>7,699</b>	<b>5,883</b>	<b>2,561</b>	<b>0</b>
<b>GDP (in mn euros)</b>	<b>248,001</b>	<b>252,001</b>	<b>258,501</b>	<b>263,801</b>	<b>268,801</b>	<b>273,801</b>	<b>279,001</b>
Deficit % GDP	3,726597877	3,366256483	3,516814248	2,9184878	2,188607929	0,935350857	0

Now in the Table Nr 2, by using the idea of “@-euro”, a self-part-financiering and based on parts of MTFs 2011-2014 Budget we will show a New 7 years MTFs for 2015-2021 .



The goal of this new MTF5 for the period 2015-2021 is to create a public sector that will provide much better services to the citizens than the MTF5 2012-2015 at the present without mortgaging the future of future generations. Moreover we **have a greater ambition** than this we have a new “goal” We will show that the Greek state can finance its own needs, a state with surplus so big as to pay one big part of the debts without excessive borrowing needs.

We start with Revenue with Taxes and social contributions the same as the years 2013, while the expenditures are the same, as the year 2011. That is, we have a budget with much less balance than the budgets of MTF5 in Table 1.

However we introduced the @-euro with a amount of 20 billion. And after a payments for debt almost equal as the 3/4 @-euro 15,5 billion we have an surplus of 9,2 billion. That we are transfer i next year’s budget.

Now in the next year we expect that the 50 % of @-euro reach the government i form of direct or indirect taxes.

We generate the same amount as @-euro, that is, 10 billion and everything else is unchanged. 2017 we expect that the economy start to get speed and @-euro generate 4 billion new taxes. The same time in finally process have return 7 billion @euro that once more the government put them back in the budget. Moreover to be more realist we have a smaller surplus in the amount of 8,4 billion.

Now after 3 year’s budget with start amount of 20 billion @-euro we manage to pay 47,5 billion of the debts without a surplus in average and give better services to the citizens in form of generated more jobs.

The next 3 years have the characteristics of expectation of increase one more billion the taxes and throw the new generation of jobs increasing with 3 more billion the social contributions.

From the other side we have the luxury to increase the total wages after 4 years balance with 6,5 % !.

And not even that we expect that 98 billion are paid of the government debt!

The last 3 year only the half amount of the @-euro returns in the budget system.

Finally, we close the 7 year’s circle of the @-euro with absorbing the last 7,5 billion of the @-euro.

The result that we have: Is a new start of Greek economy with new jobs and healthier finance for Greece and almost 1/3 less government’s debts and all that in 7 years with no Troika and “austerity” *restrictions*.

We have to note also that -3% of inflation that the Greece has today, very little will be affected because the original 20 billion of @-euro are in 7 years out of the budget.

## 5. CONCLUSIONS

In this paper we have we have introduced a new idea, the “@-euro” a self-part-financiering idea. This new idea, which is a possible solution to the Greek Crisis applied in a 7-years alternative Budget. The “@-euro” has two characteristics, first self-financiering and self-discipline. There are many positive properties between those are that is not expensive for the government, and is *counteract* to the black economy effects.

We applied also the “@-euro” in a 7 years MTF5 with exceptional positive results, with a total 42,00 billion surplus after that we have pay 113,00 billion Euro back to the creditors in a 7 year period. Moreover, no negative effects of austerity. There is fiscal stimulus without inflation!.

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## Source of Data

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