

# THE PATH TO SUSTAINABLE GROWTH

LESSONS FROM 20 YEARS GROWTH DIFFERENTIALS IN EUROPE

PART 2 - THE CAUSES OF GROWTH - EMPIRICAL RESEARCH



**MARTIN DE VliegHERE AND PAUL VREYMANS**



# THE PATH TO SUSTAINABLE GROWTH

LESSONS FROM 20 YEARS GROWTH DIFFERENTIALS IN EUROPE

<b>Part 2 - The Causes of Growth Differentials - Empirical Research.....</b>	<b>3</b>
<b>Growth Differentials: Causes in Literature - some single Correlations .....</b>	<b>3</b>
<b>Investigation Method: Multiple Regression Analysis (OLS) .....</b>	<b>4</b>
<b>Differences with Prior Studies .....</b>	<b>4</b>
<b>The Growth Model.....</b>	<b>5</b>
<b>Independent Variables:.....</b>	<b>6</b>
<b>Results of the Regression Analysis. ....</b>	<b>7</b>
<b>Conclusions from the Regression Analysis .....</b>	<b>8</b>
1. Excessive Public Spending: European governments are highly oversized	8
2. Europe is over-consuming and under-investing.	8
3. Inflation & easy-Money-Policy: the great robbery.	9
4. Interventionism and Misallocation of Resources.	13
5. Demotivation.	18
6. Welfare excesses:	19
7. Keynesian Fallacy.	20
<b>Comparison with Other Studies .....</b>	<b>21</b>
<b>Simulations at Different Sizes of Governments (Belgian Case) .....</b>	<b>22</b>
<b>Simulations at Different Sizes of Governments .....</b>	<b>23</b>
<b>Abstract.....</b>	<b>24</b>

## Part 2 - The Causes of Growth Differentials - Empirical Research

In previous chapters we noted the importance of choosing the right public policy mix for both the prosperity and the creation of new jobs. However, rather than considering the different social models as a whole and indivisible mix of fiscal and monetary policies, in this part, we analyse the individual aspects of the macro-economic policy of different social models. This should allow identifying which aspects from each of the policy mixes prove beneficial, and which aspects prove harmful to progress.

### Growth Differentials: Causes in Literature - some single Correlations

Growth differences between the European countries are indeed remarkable, and causes should can be identified. In spite of the fact that European countries have very similar states of development and labour ethics, huge growth differentials are observed. In the 18 years period from 1984 to 2002 Denmark grew with 35% only. Ireland's wealth on the contrary rose by no less than 167% over the same period. In barely half a generation Ireland evolved from the second poorest to the second richest country of Europe. Similar differences in job creation are observed. The observation raises the question as to what causes these remarkable growth differences and if other countries could achieve the same economic and social performance like Ireland or Luxembourg.

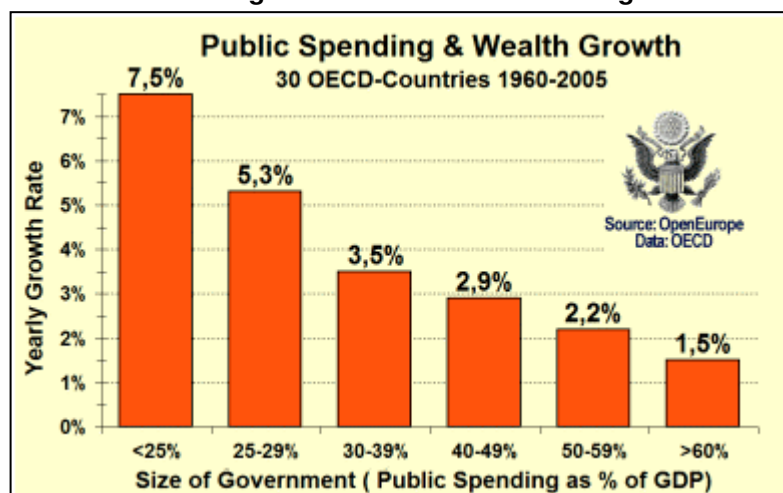
A great number of individual factors, including some of the public policy mix, influence growth rates. Some are well documented in economic literature such as Size of government spending, or openness of the economy to foreign trade. Some of the growth effects appear clearly even from single correlations.

#### Size of government

Although mostly denied, "forgotten" or minimised in Continental European literature, Anglo-Saxon literature overwhelmingly demonstrated the robust negative relation between economic growth and government spending. The fact that most fundamental research in Europe is government sponsored by one way or another is very likely the cause of this transatlantic divergence of opinions.

The American economist [James Gwartney](#) made pioneering research on this subject. He examined the causes of growth differentials between the OECD countries over a long period of 1960 until 1996, and found evidence of the direct correlation between economic growth and tax burden. The higher public spending, the lower the growth rates.

Gwartney found that in countries and periods in which government spending was smaller than 25% of GDP rose on average with 7.5%. Countries with government spending over 60% realised growth rates of 1,5% only.



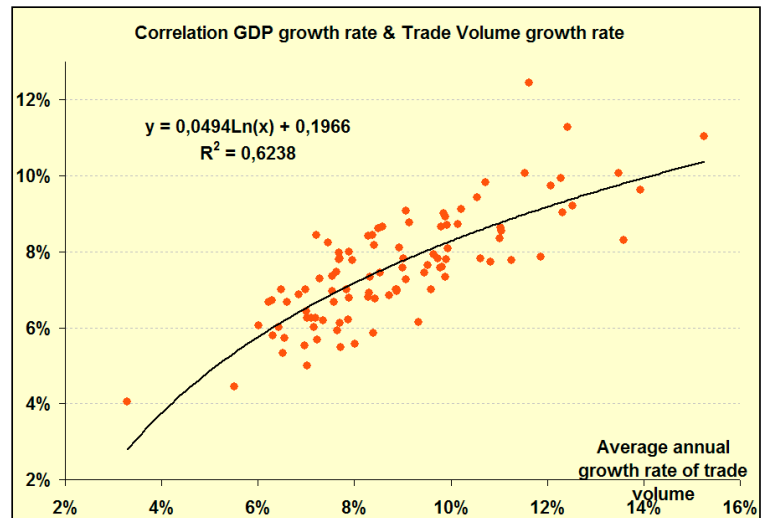
For Gwartney the explanation for this phenomenon is as logical as it is simple. The higher the tax levels the lower the incentive for people to make a productive contribution to society. The higher the fiscal burden, the more resources flow from the productive sector to the ever more inefficient government apparatus. The same correlation was confirmed in a recent study by Lorraine Mullally who in 2006 extended the analysis to over 1,000 data pairs covering 30 OECD countries over a period from 1960 - 2005 and who came so similar results

## Openness to foreign markets.

Another well-documented factor determining wealth of a country is the openness to foreign trade. The graph correlates the annual GDP growth rate to growth rate foreign trade relative to GDP, as an indicator of openness of the economy. The positive relation appears quite clear from the single correlation, and confirms the intuition of the beneficial effects of foreign trade on prosperity.

A large number of other factors are described in the economic literature as susceptible of boosting economic performance. According to Keynesian theory, deficit spending and low interest rates can stimulate slow growth.

However for many variables the relation to growth does not appear evidently from single correlations. When the growth effect is minor the relation is often hidden or disturbed by influences of other and more influential variables. As a consequence the reliability of single correlations in explaining the growth effect of multiple factors is limited.



## Investigation Method: Multiple Regression Analysis (OLS)

The standard scientific procedure and only reliable technique to investigate the relationship between several independent variables and a single dependent variable is multiple regression. The technique is widely used in the most diverse branches of empirical research; particularly in economics and medic. It is with the same technique, that medical science investigates the causal relations between living and feedings habits and our health, our life expectation or illness phenomena.

We are therefore relying on the same technique for finding the causes of growth differentials between European countries. Other factors taken in consideration are factors like exchange rate changes, education levels, consumption rate, Interest rates, budgetary deficits, membership of the European Monetary Union etc. The full list of variables considered is listed below

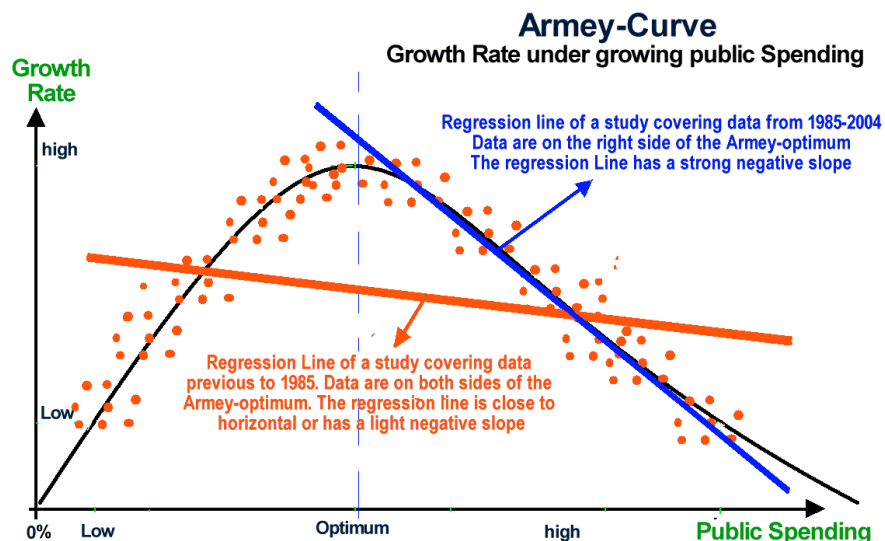
Multiple regression allows calculating with mathematical precision on basis of historical data the exact individual effect of many simultaneous growth determinants, even if their individual impact is small. Multiple-regression also allows determining for each of the independent variables whether the relation to the dependent variable is significant or not, and how strong the impact of each factor actually is.

## Differences with Prior Studies

Our investigation is specific and original for two reasons: We bring together a rather high number of growth determinants such as described in both Anglo-Saxon and continental European economic literature. The relative high number and selective choice of causal factors should allow explaining growth differentials to a higher degree and with higher precision than studies considering fewer causes only.

Unlike most other growth models, we furthermore implement the recent Barro-Armeij theories about government spending in our growth model. According to Barro and Armeij the relationship between government spending and growth is a non-linear one, characterised by a country-specific optimum government spending level. Very recently, Primož (2004) calculated optimal levels of government spending for European countries around 35%-40% of GDP. In countries with government spending below this optimum, additional government spending leads to higher growth rates, in countries with government budgets above this optimal level additional government spending leads to slower growth.

Most prior growth models have been considering in their analysis vast periods from 1970 to 2003, during which both public under-spending and over-spending have been taken into account. As a result, positive and negative growth effects of public spending on both sides of the Arme-y-optimum have been compensating. This has resulted in grossly underestimated coefficients and significance of the growth effect of government spending in prior growth models. (Resulting in a close to horizontal regression line)



For this reason, we limit our research project, with particular interest in finding the magnitude of today's growth effect of excessive public spending, to countries and to a period during which government spending was above the optimal level as calculated by Primoz. In this range a linear relation as hypothesised by the linear regression technique can be presumed, and should result in a regression line with stronger inclination than studies covering data previous to 1985.

Having selected countries with excessive government spending only, the conclusions of our findings are of course relevant to such countries only, and certainly do not apply to developing countries, still in the stage of building up collective infrastructure or the state of law.

## The Growth Model

By means of multiple linear regression analysis, we determine the causes of the growth differentials between 15 EU countries (the 12 Euro countries + 3 Non-Euro EU-members (UK, Denmark and Sweden). The investigation covers a period of 20 year from (1985-2004), making sure no period with obvious public under-spending is considered, and making sure the pre-conditions of linearity in multiple regression analysis are met.

In total we have 300 observations (15 countries x 20 years).

Following the economic theory we assume that the Prosperity Level in a country in a particular year is determined by different factors. These can be external factors, country-specific characteristics or state interference in the economy. We have special attention for the factors which can be determined by the authorities, and which are described in the literature as influencing growth; most particularly the size of Government Spending, the structure of tax burden, the budgetary deficit and the short term interest rates.

The relation was investigated between growth performances and 16 plausible independent variables. Regressions were calculated with time lags of 0, 1, 2, 3, and 4 year. We refer to [appendix 3](#) for a detailed report of data and sources.

After elimination of the variables with excessive colinearity following variables were retained:

**Dependent Variable:** Prosperity Level 1984=100 - GNP/Cap at price level and PPP of 2000

Growth being an exponential function, GDP data were preliminarily transformed to their natural logarithm (Ln), thereby restoring the presumed linearity of the function.

**Independent Variables:**

### **1. Time variable: years 1985 –2004**

### **2. Country-specific characteristics**

- Age structure (% population above the 65 year)
- Level of education: net participation at secondary education %
- % of GDP spent on R & D
- The openness to foreign Trade ( Export as % of GDP : % change against previous year )
- Prosperity level at the beginning of examined period (GDP 1984)

### **.4. Country-specific Socio-economic policy variables**

- Government spending as a % of GNP
- Household final consumption expenditure % of GDP
- Direct Tax burden (taxes on income and profits plus soc.sec. contributions as a % of total taxes)
- Net European contribution to (+) or subsidies from (-) the EU as % of GDP
- Annual working hours / inhabitant ( Participation rate x hours worked )

### **5. Financial Traditional Keynesian growth policies (country-specific)**

- Real interest rate (Nominal rate – inflation: average 3M deposit & 10Yr note)
- Budgetary deficit: Government financial balances Surplus (+) or deficit (-) as a % of GDP
- Inflation rate
- Exchange rates - national currency per US dollar: % change against previous year

### **6. EMU – dummy**

- Binary variable “membership of the ECU”

We assume that prosperity growth is either positively or negatively influenced by above-mentioned factors; or that:

Prosperity Level in a country at a certain point of time =  $f$  (Size of Government + Direct Taxation + Consumption Rate + Interest Rates + Budgetary Surplus + time + 11 other Country Specific Characteristics)

Or symbolically can note the multidimensional regression line as follows:

$$\text{Ln (PL)} = \mathbf{a. SG} + \mathbf{b. DT} + \mathbf{c. CR} + \mathbf{d. STI} + \mathbf{e. BS} + \sum \mathbf{f_i CSC}$$

Multiple regression analysis allows to calculate on basis of the statistical data the coefficients (elasticity's) a,b,c,d,e and  $f_i$  of the regression function. These coefficients give an idea how much growth results from a change in each of each of the independent variables, whilst all other variables remain unchanged. Multiple regression analysis also allows calculating the relevance of the relations between the dependant and each of the independent variables. This significance of each relation is expressed as a sig-value, which can be interpreted as the statistical chance that no relation between the dependent and independent variable exists. Independent variables showing a maximal sig-value of 0,05 are therefor believed to have a relation to the independent variable with a statistical certainty of 95%. Some researchers consider a 0,1 value as safe for assuming the relation as significant.

Where available we used OCDE data. A few missing figures of the 9000 independent variable-data needed for this regression analysis were estimated according to the best available practices (interpolation). Data distribution of the dependent variable fell within the standards of a normal distribution. Data of the independent variables being expressed as a percentage (except for the participation rate expressed in hours / inhabitant), there was no need of recalculating data of the independent variables to their logarithms.

## Results of the Regression Analysis.

The regression analysis results in a remarkably high regression coefficient ( $R^2=0,87$ ). Growth differentials between the European countries examined were explained for 87% by the enumerated factors. 13% only of the growth differentials must be attributed to factors other than these considered in the investigation. Most of the results are consistent in the 5 regressions with-lags of 0,1,2,3 and 4 year, and in several alternative growth models, which confirms the robustness of the model described.

### Unstandardised coefficients and significance of the independent variables

In 5 Regressions with time lags of the growth effects of 0,1,2,3 and 4 years are listed in the table below. Variables are listed in descending order of magnitude of their total effect on growth (Descending order of the average of the standardised "Beta coefficients" over the 5 regressions)

	significant at the 99,99% reliability level
	significant at the 99% reliability level
	significant at the 95% reliability level
	significant at the 90% reliability level
	significance below the 90% reliability level

Unstandardized Coefficients							Sig.						
GDP	0y Time lag	1y Time lag	2y Time lag	3y Time lag	4y Time lag	Average	Harmonic mean	0y Time lag	1y Time lag	2y Time lag	3y Time lag	4y Time lag	
Time	2,0149% *****	1,8866% *****	1,7796% *****	1,7307% *****	1,7800% *****	1,8383% *****	1,45437E-20	1,19356E-20	1,51892E-20	1,96801E-20	2,6021E-20	9,53029E-21	
SizeGov	-0,9974% *****	-1,0395% *****	-1,0493% *****	-1,0283% *****	-0,9372% *****	-1,0104% *****	1,91502E-20	1,19356E-20	1,51892E-20	1,52768E-19	5,14159E-14	9,53029E-21	
Consum	-1,0268% *****	-1,0840% *****	-1,1517% *****	-1,2563% *****	-1,3648% *****	-1,1767% *****	7,89682E-20	1,75629E-19	4,81789E-20	2,81962E-20	8,35752E-19	4,88779E-18	
Inflation	-0,7463% *****	-1,0352% *****	-1,3085% *****	-1,4917% *****	-1,4892% *****	-1,2142% *****	2,18583E-10	5,19914E-07	7,68641E-10	4,79213E-11	1,4202E-09	0,000312948	
Educ	-0,4894% *****	-0,4968% *****	-0,4753% *****	-0,4606% *****	-0,5166% *****	-0,4877% *****	9,65403E-06	4,83765E-06	4,46146E-05	0,00038934	0,000454314	3,52085E-06	
R&D	2,6342% ***	3,1015% *****	3,5416% *****	4,0382% *****	4,8698% *****	3,6371% *****	0,000749181	0,002806791	0,001078775	0,000610841	0,000273661	0,010054371	
Partic	29,7908% *****	26,6924% *****	22,2370% *****	18,6255% *****	14,7273% *****	22,4146% *****	3,09521E-10	3,99874E-09	1,92853E-06	0,000185396	0,008219238	6,28797E-11	
Subsid	-0,9000% *****	-1,0962% *****	-1,4179% *****	-1,6177% *****	-2,0196% *****	-1,4103% *****	1,69965E-07	0,000230621	4,96102E-06	8,22376E-07	3,57199E-08	0,003166574	
Wealth	-0,0704% ***	-0,0741% **	-0,0874% **	-0,1126% **	-0,1525% **	-0,0994% **	0,029796985	0,101847162	0,065487089	0,030884965	0,009824262	0,117008854	
openness	0,1108% ***	0,1249% **	0,1270% **	0,1169% **	0,1042% **	0,1168% **	0,009952415	0,004936113	0,006473687	0,021322827	0,069419903	0,011900881	
Budget	-0,3378% **	-0,3388% **	-0,3675% **	-0,4233% **	-0,4179% **	-0,3770% **	0,043476711	0,058256329	0,043051644	0,027079234	0,045456868	0,063762806	
SocialSpend	-0,1101% **	-0,2075% **	-0,3085% **	-0,3840% **	-0,3551% **	-0,2731% **	0,099350926	0,193270666	0,074890052	0,049537896	0,105307148	0,472353037	
R.Intrest	-0,1556% **	-0,5808% **	-0,8522% **	-0,9075% **	-0,8222% **	-0,6637% **	0,003238342	0,028230356	0,001496495	0,001396982	0,008146347	0,566266945	
EMU	0,1667% **	-1,4944% **	-3,2442% **	-3,8636% **	-4,3901% **	-2,5651% **	0,06040796	0,293393706	0,03118145	0,030414468	0,075138458	0,905832527	
d XRATE	-0,0215% *	-0,0283% *	-0,0119% *	-0,0036% *	0,0206% *	-0,0090% *	0,634057475	0,441957343	0,770436022	0,934683328	0,671715847	0,566095458	
Tax.Dir.Shr	0,0769% *	0,0499% *	0,0037% *	-0,0586% *	-0,1112% *	-0,0078% *	0,49242317	0,592812509	0,968546561	0,555999214	0,306762943	0,420856016	

## Conclusions from the Regression Analysis

The regression results give very significant results and suggest concrete conclusions as to policy choices. In the analysis below we consider results only, which proved highly robust; results, which combine both high significance and consistency in the 5, examined models (with 5 time-lags each: from 0 to 4 years). The results can be summarised in the identification of 7 growth killers, listed in order of impact on growth:

### The seven Growth and Job Killers

- 1. Excessive Government*
- 2. Over-Consumption and under-Investment*
- 3. Inflation & easy Money Policy*
- 4. Interventionism with Misallocation of Resources*
- 5. Demotivation*
- 6. Welfare Excesses*
- 7. Keynesian Economic Policy*

#### 1. Excessive Public Spending: European governments are highly oversized

The regression confirms excessive public spending be the most important single factor responsible for slow growth; much more important than obvious factors such as levels of education, interest rates or even participation rates. The negative relation between size of public spending and prosperity growth is extremely significant in all 5 growth models ( $\text{sig}=1,45\text{E}-20$ ) making the likelihood of the negative relation close to certainty. The standard error is small and the 95% confidence interval is very narrow. Countries with a 1,01% GDP lower government spending have some 1,01% higher growth rate.

The mechanisms behind the strong growth effect of lower government spending are described by Armeij and Barro, and find their ultimate cause in higher marginal productivity of private spending than public spending, as well as through higher incentives to productive contribution when the tax burden falls. Public spending above the Armeij optimum is indeed harmful because governments in general spend less efficiently and waste more than the private sector. But high tax rates are also harmful because they discourage productive work, saving and investment and thus encourage growth of the underground economy.

European governments are simply too big, they spend too much and spend money foolishly. They subsidise the wrong things and penalise the right things. They create programs to solve problems they caused themselves in the first place and which invariably will cause more distortions and new problems. Therefore Europe's prime economic and moral imperative is to reduce the size and scope of government.

#### 2. Europe is over-consuming and under-investing.

The second most important growth determinant is the household consumption. Countries with higher household consumption as a % of total income have significant lower growth rates. The negative growth effect of excessive consumption is consistent in all five regressions with delayed growth effects from 0 to 4 years. Countries with a 1% GDP lower were found to have 1.17% lower growth on average.

These findings stand of course diametrical against Keynesian theory claiming that stimulating consumption could boost growth. The reasons for the negative relation are obvious. The higher the consumption rate, the lower the savings and investment rate. Obviously the long-term effects of a Keynesian consumption boosting policy is lagging investment, ultimately resulting in poor growth, low job creation, and low wealth for the citizens.

A shift in spending on the European level from consumption to investment could therefore seriously stimulate growth. The obvious means to realise such a shift is by lowering the fiscal burden on savings and increasing the tax burden on consumption. Unfortunately the European common savings directive goes in the opposite direction. Taxes on savings income are due to increase from 15% to 35% by the year 2011. Higher taxation on savings will slow down savings and investment and boost consumption. The first signs of slowing savings are already noticeable in many countries. The savings directive is particularly incompatible with the need for increased savings as a consequence of Europe's ageing population. With people living substantially longer pension reserves have to be substantially larger. The present pay-as-you go pension schemes lack the reserves for ageing, so retired will increasingly have to rely on private pension schemes or private savings for their survival. Exactly these private savings are now particularly hit by the new savings directive, which may prove dramatic for the living standard of the retired.

### 3. Inflation & easy-Money-Policy: the great robbery.

The third most important factor related to slow growth is inflation. Inflation proves indeed disastrous for real prosperity in all regressions with time lags of 1,2,3 and 4 years. With a sig value of 2.18E-10, the negative impact of inflation on growth is statistically near to absolute certainty. The standard error of the coefficient is small, and the 95% confidence interval very narrow. All other things equal A 1% higher inflation rate leads to a 1.21% slower real growth rate, with the long term growth effects still increasing as time goes by. The policy conclusions concern monetary policy, which primary target should be to avoid inflation. Although the regression found some positive short-term growth effect from low real interest rates, these short-term effect is overshadowed by the long term negative growth effects of inflation resulting from lax monetary policy.

A limited inflation of a couple of percentages is often accepted as a minor inconvenience of easy money policy. Both the long-term consequences and cumulative effects of inflation are in deed often underestimated. In recent years European inflation has averaged a level in excess of 2%; a level that is generally considered as acceptable by most inflationists. However this 2% inflation is an average of both imported produce and goods and services produced locally. Massive imports of extremely low priced overseas consumer goods (China, Vietnam, India...) are thereby hiding the runaway inflation of goods and services produced locally. Prices of local produce and services have indeed risen exponentially in the last few years, particularly in the sectors protected from international competition, such as medical services, old age care, house rent, public services, education etc. ...

*As a direct result of the (hidden local) inflation, the entire benefits of the productivity gains of globalisation have been lost for the consumer.* This unique productivity gain in history is indeed not reflected in an increase of the purchasing power of the European consumer or in a decrease of the real prices. On the contrary, despite globalisation and the productivity gain unprecedented in history, average price levels continue to rise, obliterating for the Europeans the whole gain of wealth provided by globalisation. The Central Bank's easy money policy with money supply growing at a rate exceeding the growth rate of the real economy by more than 4% is the sole responsible for this gigantic loss of buying power.

### Miscalcuclations

The underestimation of the long term cumulative effects of inflation lead to devastating wrong spending decisions, and to unadequate saving. A 6% inflation rate halves the purchase power of money in just 11 years. A slight difference between the true rate of inflation and the official rate reported by the authorities leads to much faster cumulative depreciation than imagined. Keeping up with the hidden inflation is particularly tricky for the elderly who experience higher cost-of-living increases than the rest of the population because of disproportionate expenses for local services that are either state-monopolised or protected from foreign competition. Inflation is indeed causing huge miscalculations as to the future buying power of the households' savings and is the main reason why so many Europeans fall below the poverty line when they are so (un-)lucky to reach old age.



Inflation: even the strongest currency will crumble under excessive money - supply.  
 In Germany sending a letter costed 50.000.000.000 Mark by 1923. (German stamps 1921-1923)

Even more devastating are the long run effects of "asset inflation". In particular the effects of a real estate bubble are underestimated. In many European countries real estate prices are now rising faster even than throughout the 20th century, which was already unprecedented in history for the size of its asset inflation. The most remarkable long-term effect of this "asset inflation" is that Europe's hard working middle class households have today a very hard time acquiring an own family house, even with two salaries, whereas previous generations usually achieved this dream on one single salary only. It is asset inflation that erodes the workers buying power and causes young workers to spend up to half of their income on house rent. Inflation is just another form of counterproductive redistribution.

The economic distortions resulting from inflation in the end particularly affect the have-nots through high rent prices, unavoidably resulting from rising estate prices. The results of the regression analysis suggest that the long-term inflationary effects are outmatching the limited short-term benefits of an easy-money policy. Artificially low interest rates have caused the money supply to expand at a faster rate than the real economy. Fast growing quantities of money have been chasing a slow growing quantity of goods. Buying power, not covered by real production has sent prices skyrocketing. Easy lending also made investment money available at a much faster rate than new houses could be built, and entrepreneurial initiative could develop new projects.

As a consequence real estate prices, industrial estates and company shares have blown up to an unprecedented bubble, which sooner or later must burst. As a result of the artificially low interest rates resources have been invested and immobilised resources in "old" projects much of which are outdated or have low returns. Under "natural" interest rates these low-yielding or outdated projects would since long have been abandoned. The immobilisation of resources in outdated projects extends the life cycle of old investment.

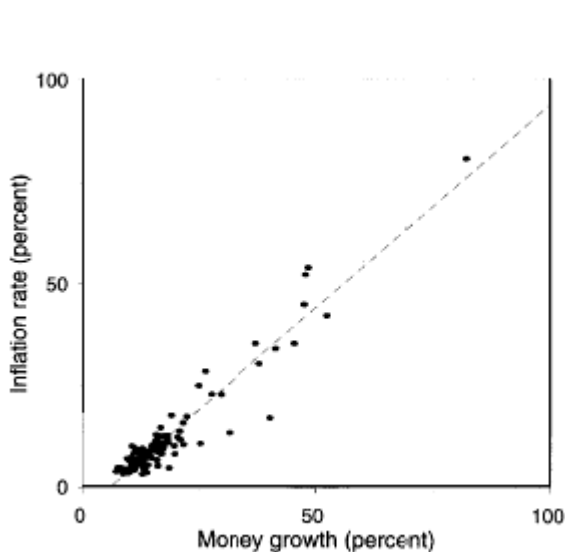


FIGURE 1

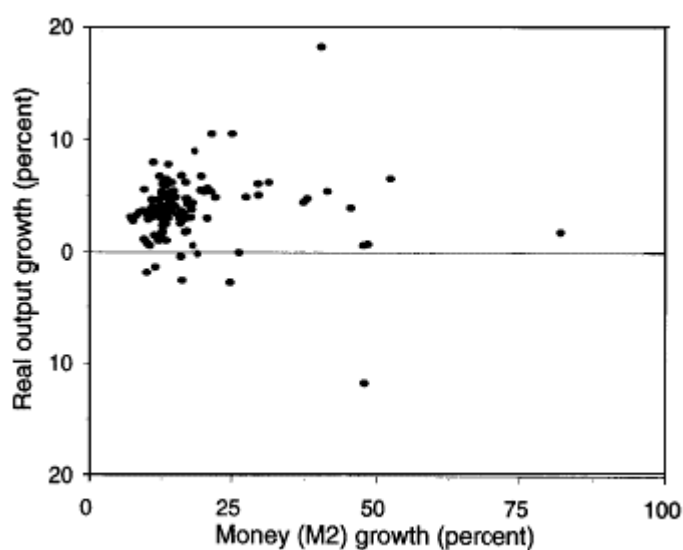
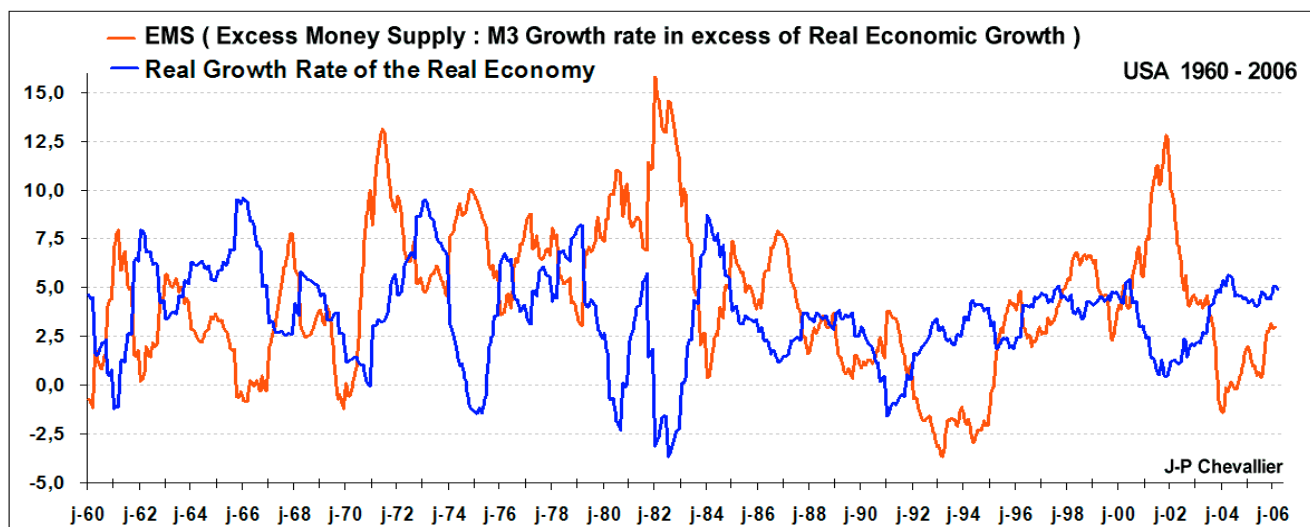


FIGURE 2

As a result, easy money tends to slow down the natural process of creative destruction that has to take place during every natural economical downturn. In the end easy money prolongs economical slowdowns rather than remedying it. The dogmatic belief that easy money policy with low interest rates could durably stimulate growth is increasingly being questioned as ever more empirical evidence seems to contradict the effectiveness of such monetary policy. So were two decades of close to zero interest rates in Japan and Switzerland apparently unable to give any stimulus to their sluggish growth. The severest critique has come from Robert E. LUCAS<sup>1</sup>. In his research into the effectiveness of monetary policy, which yielded him the 1995 Nobel Prize in economics, he found no significant relation between Money growth and growth and growth of the real economy. For Lucas, the only significant effect of increasing the money supply is increasing inflation, which obviously slows down growth in the long run.

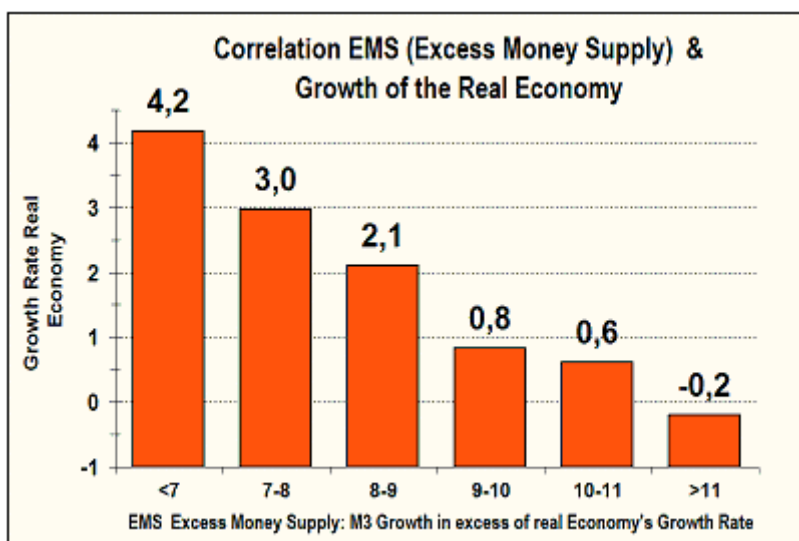
<sup>1</sup> <http://nobelprize.org/economics/laureates/1995/lucas-lecture.pdf>

Very remarkable also are recent empirical findings by J-P. Chevallier<sup>2</sup>. He found Excess Money Supply (EMS: Growth of the Money Supply M3 in excess of the growth rate of the real economy) to have a remarkable inverse relation to the real economy's growth rate. High EMS coincides with low growth. Chevallier's study is based on over 550 data pairs covering 47 years of US monetary history from 1960 till 2006. The inverse course of both variables in the figure below is indeed too remarkable to be coincidental.



Except for the short and tense transition period from the Bretton Woods monetary system to floating currencies in the early seventies, the inverse relation is particularly unambiguous. So an easy money policy causing the monetary aggregate M3 to grow faster than the growth of the real economy could in fact very well slow down the economy rather than boosting it.

However, in spite of contrary empirical evidence, inflationists continue to claim positive growth effects from an easy money policy. Their explanations are theoretical, and convincing empirical evidence is lacking. Inflationists argue that lowering the cost of borrowing increases profitability of investment, and in doing so, launches new initiatives.. The inflationists' theory however fully ignores the income side of interest payments. Obviously every Euro of interest paid by a debtor is an Euro income for a creditor. Consequently increased activity by indebted firms are in fact compensated by decreased investment by creditors. In fact artificially low interest do not only impair the creditors' enchantment to save and postpone consumption, but also their possibilities to do so in parallel with the cuts in their income from rent.



Obviously inflation causes a re-distribution from creditors towards debtors, causing a penalisation of savings and a reward for spending. It is a re-distribution from those who make productive usage of their income to those who consume it, and from financially healthy businesses towards the indebted ones. Contrary to popular belief the big capitalists are not the prime victims of the operation as they see their company shares rise. However small savers and wage earners are, as they are the most important and by far the most numerous class of creditors. The main beneficiaries of are the large debtors such as the state and bankers who obviously benefit not only directly from the creation of money, but also from the low interest rates assuring them of an artificially cheap supply of their "raw material".

<sup>2</sup> [http://chevallier.turgot.org/a286-Creation\\_monetaire\\_et\\_croissance.html](http://chevallier.turgot.org/a286-Creation_monetaire_et_croissance.html)

## Easy-Money & inflation: a great Robbery that depresses the Economy.

Inflation is a stealthy robbery, diverting resources from productive investment and therefor slowing down the economy. Money can indeed only maintain its buying power when an increase in the money supply is matched by an equivalent increase of the supply of real goods and services. Central Banks often set interest rates at artificially low levels supposedly to stimulate growth. These low interest rates cause demand for loans to increase excessively and the money supply to expand at a faster rate than the real economy. This results in fast growing amounts of money chasing slowly growing quantities of goods causing the price levels to rise.

**Robbery:** Inflationary money such as bankers create from thin air obviously does not increase wealth of a nation nor its real buying power, as their increase of the money supply is not accompanied by an increase of real goods or services. The nominal buying power such money provides to borrowers is merely diluted buying power, diluted from the real buying power of someone else. It is indeed buying power stealthy robbed from people having earned theirs through hard labour or in exchange for real goods and services. Obviously the stealthy devaluation of peoples' labour and savings progressively discourages the producers of real wealth. Eventually they tend to reduce their productive contribution, resulting in slowdown of growth; just the opposite easy money was set up to do.

So contrary popular belief and to bankers' claims, easy-money policy can never cause real growth, but merely creates a nominal illusion of progress. In the end real wealth can only be increased through increasing the availability of real goods and services, and the only way to increase production of tangible services and commodities is by working more or by producing more efficiently. And productivity can only be improved to a substantial extend through investment in better machines, superior techniques or improved infrastructure. So a policy aiming real growth must therefor promote saving and investment, and certainly should not stimulate consumption. Easy money does the opposite: it promotes consumption, discourages saving, penalises investment and productive contribution, in the long run all slowing down real growth; exactly the opposite it was set up to do.

**Diverting Resources and postponing renovation.** Artificially low interest rates merely enlarge borrowing margins. They do not increase earnings or possession. This easy access to loans therefor merely creates an illusion of wealth tempting borrowers into unsustainable debt. It is this illusion which temporarily causes an artificial excess of demand over supply, temporarily making everything saleable. Easy loans make expensive consumer goods suddenly appear affordable. Outdated real estate turn into desirable investment projects, and so do business concepts with low returns whose life-cycle has since long gone by. Low interest rates and excessive money supply consequently cause asset prices tot rise. As a consequence ever more buying power gets immobilised for far too long in outdated and low-return projects or in shares of outdated businesses. By doing so, easy money policy diverts resources from productive investment, ultimately slowing down technological evolution, productivity gains and progress. Real estate in the end gets so expensive that house rent absorbs much of people's earnings, and acquiring a family house engages lifetime savings. The most devastating effect of easy-money however is that by penalising saving, easy money stimulates over-consumption, and slows down capital formation; ultimately the indispensable resource of all technological progress.



#### 4. Interventionism and Misallocation of Resources.

The next crucial factors affecting growth negatively can be grouped under the same denominator "erroneous interventionism with misallocation of resources". This concerns the allocation of resources to the sectors of public policy education, R&D and the like, and more generally misallocation of resources through EU subsidies in general.

Economic problems are often blamed on poor judgement and erroneous behaviour of individuals and private firms. Being incapable of understanding the complexities of the economic system, and to foresee the long-term consequences of their choices, individuals and single firms are blamed of irrational exuberance, choosing shortsighted solutions and above all to have irrational behaviour both in their consumption and their investment patterns. Scientific organisation and central planning are often put forward as the logical solution to bring intelligence and "economic structure" in the behaviour of all these irrational individuals and companies.

Private individuals and firms do indeed often make wrong choices, but by their very nature the macro-economic impact of individual errors is small, and errors of judgement of individuals are most often compensated by contrary judgement of other individuals. Furthermore individual firms making too many wrong decisions are soon sanctioned by elimination from the market. So markets have auto-corrective capacities.

However also planners and scientists make mistakes. The economic system being of such a complexity, no theory is perfect and sufficiently powerful to encompass all possible events with all the relations of cause and consequence. The sole difference is that when central planners make mistakes, the macro-economic impact is tremendous. The macro-economic consequences neither are compensated, nor auto-correcting through elimination of the planners with poor judgement. History has in deed extensively proven that central planning sooner or later leads to economic disaster. Still our European leaders continue to believe that central planning, with incentives, subsidies and regulations are better tools for running the economy than the judgement of individuals searching their own interest and entering contracts with each other on a voluntary basis.

Great European plans like the "Lisbon Agenda" are in fact nothing less than central planning. The main objective of the plan is that Europe should become "the most competitive and most dynamic economy by 2010". This might sound like an innocent or even a good idea. But both the rhetoric about catching up with the United States, the time horizon and methods are remarkably similar to the central plans in the former Sowjet Union. The only difference is that instead of promoting heavy industry as a tool to achieve their objectives in the Sowjet times, the Lisbon Agenda is now encouraging information technology (IT). Whereas coal and steel used to be the fashion fifty years ago, now it is computers. However the principle remains the same – the politicians believe that they are better qualified than people and businesses in a free market to decide how much money should be invested and in what industries. This principle did not work under communism, and it will not work in Europe either, as results halfway through the Lisbon-planning period already suggest.

#### Planning errors.

But there is not only the economic nonsense of wanting to plan human behaviour and interactions in an overall economic plan. The Lisbon Agenda has also failed to identify the real causes of Europe's economic slowdown and, as a result, prescribes the wrong remedies. The problem of European economy is not the poor judgement of private individuals and firms, who are reluctant to buy and sell on the Internet or unwilling to invest more into research and development. European economy suffers from "Euro sclerosis", i.e. rigid legislation that prevents people from investing in new businesses and from changing flexibly their jobs. The problem of European economy is that authorities put excessive tax burdens and regulations on those who produce wealth. Europe's economic problems cannot be solved by pouring more money into technology, or by connecting everybody to the Internet, nor even by authorities setting up "business incubators".

In fact, the Lisbon agenda is a mixture of recommendations, some of which may be good and some misguiding. However, be it, as a whole, a good or a bad plan, it is above all a plan, and like all Sowjet plans failed the Lisbon Agenda is doomed to fail. A few of the Lisbon recommendations were analysed as independent variables in the regression analysis. The results found both recommendations that are favourable to growth and Lisbon recommendations that are counterproductive.

## 4.1 Europe's has too many University Graduates

One of the erroneous dogmas of the Lisbon Strategy is as that investing in knowledge and education could solve Europe's problems. Having no scientific basis whatsoever, this Lisbon dogma is purely intuitive. This growth strategy seems to ignore that investing in education might just as well draw scarce resources away from other and more urgent domains of investment, where these resources could be used much more effectively in creating wealth.

As a matter of fact the regression analysis confirms that countries with a higher percentage of the population that has attended tertiary education, have significantly slower growth. So exactly the contrary the Lisbon dogma suggests. There are several reasons for the negative relation. The wealth benefits of higher education seem to be smaller than the (opportunity-) cost of the education.

The value of any product or service being the sole result of offer and demand, there are no a priori reasons to believe the highly educated produce a higher added value than say the manual worker. On the contrary, in many European countries a situation has developed with shortage of skilled manual professionals such as plumbers and an excess of professionals with 3rd level education such as lawyers, and professors in political and social sciences. Today delays for home repair services are many times longer than for having a medical check-up. Also the employment of overqualified personnel for the jobs on offer is at stake. Further widening of the gap to the optimal proportion between both types of professionals is likely to deteriorate growth prospects even further.

Nevertheless other social objectives than the creation of wealth can justify raising education levels. However a policy aiming at prolonging obligatory school duty make no economical sense and is even contra productive. The absurd European system of keeping unmotivated pupils on the school banks for longer than they wish is a pure waste of the pupil's valuable time and the valuable efforts and patience of their teachers. Replacing the absurd school-duty by a system of learning-rights whereby pupils can take up their learning rights at any later stage in life, whenever they feel motivated, or feel the need to have their skills updated, is likely to deliver a much more performing education system.

## 4.2 Investment in R&D.

However investment in Research and development looks as a better idea. The regression analysis found that countries investing heavier in R&D have significantly faster growth rates. So investment in research might be one of the better uses of public funds. However the question is if authorities and more particularly the EU should engage in all kind of incentives promoting R&D as a means of public policy. When authorities promote initiatives in R&D through subsidies and incentives or intervene in investment decisions they generally tend to distort markets.

The best way to allocate resources is through the market mechanism. When politicians who are already over-stressed by so many responsibilities, and who may never have seen a sales department, take over investment decisions from business professionals, their hasty decisions may have less consideration and be less well founded. Moreover businessmen bear financial responsibilities for their decisions. So the most indicated level of management for investment decisions is at the business level. The best plan is no plan Friedman wrote.

Moreover, subsidies by definition imply taxing resources from profitable activities to redistribute them to less profitable ones and in the process of the redistribution making the costs of administration, control, enforcement etc.. This tax and subsidy impede the market's functioning and often benefit non-economic, special interest reasons. Therefore a more sensible thing to do is to lower taxes, leaving individual firms with a larger part of the resources they earned themselves, and using these to invest in R&D whenever they expect beneficial results from such research.

When authorities intervene in the process the question also arises how to define research, and how to decide how much and which sectors of industry must benefit from these subsidies and incentives. In order to be workable, these definitions must be kept rather vague. Consequently access to R&D funds will be multi-interpretable and will most often be used as hidden subsidies to outdated industries, whereby the big companies with the most influential lobbying agents will get the bulk of all resources. Obviously this is not the most effective way to attribute resources to the best performing industries.

### 4.3 Inefficient Inter-State Transfers.

As intuition suggests, the regression analysis found a significant negative relation between and the (net) contributions (+) to the EU and growth performance. Nations with higher net contribution to the EU budget have significantly slower growth. This leads to the main conclusion as to this growth determinant that growth generated from EU subsidies can only be realised at the expense of less growth in the net contributing countries.

The question is if such a redistribution of wealth between states is a good idea. Why should taxpayers send money to Brussels, which takes its slice, adds a few conditions and stipulation and then sends it back to the states? Poorer countries will of course join the Euro professionals in their absurd call forever more recourses and EU subsidies. They support projects such as Common Agriculture Policy, structural subsidies and common social policy in their favour and financed by the richer nations. They will support bigger common expenditures, bigger common taxes and the per-GDP-contributions to common budget. However this money needs to be taken from the richer countries, which will call for lower subsidies, as they believe redistribution is unjust and inefficient. So this redistribution among nations does not only lead to losses due to the cost of central intervention but most of all result in controversy.

The richer countries can put up with that for some time. But sooner or later their voters will realise that the net contribution is costing them wealth and progress, and will consider this unjust and they might want to vote for stopping the money transfers to the poorer countries. This raises the question both of the sustainability of inter-state transfers, and of the opportunity of further political integration.

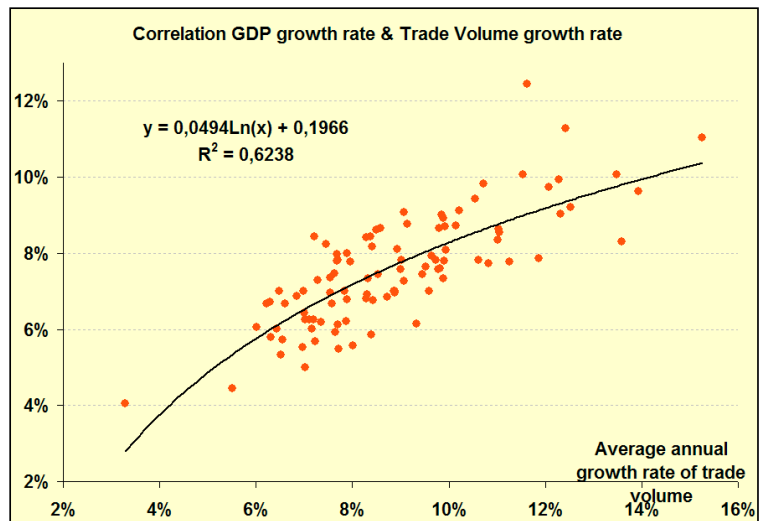


Once in a politically integrated Europe, with majority rule, the net contributors to the EU will of course always be voted down. Then they will call for separation. They will not be allowed to leave the Union. They will start to fight with non-political weapons. This is approximately the worst European scenario imaginable: separatism of those who do not wish to share a state with the majority.

A nation subsidising another state will either want to control or to leave the state – subordination or separation are the only possibilities. International redistribution of wealth contains a latent conflict and is potentially dangerous. The split of former Czechoslovakia, the tension between the West and the East part of Germany, or the tension between Flanders and Wallonia in Belgium, between continental France and Corsica, between North and South Italy may serve as examples.

## 4.4 The Alternative to EU subsidies: open Markets

As intuition and economic theory suggests, the regression found very significant benefits of open markets. Countries opening their markets faster have significantly higher growth rates. The difference is highly significant in all 5 regressions. Contrary to EU subsidies; the wealth created through opening of markets is not created at the expense of other countries, but from the added value forthcoming from free trade between citizens of different nations. These in fact only consent to such trade when it is beneficial for both parties. So in such trade both the wealthy and the poor nations benefit. This wealth does not stem from imposed solidarity but from free interactions between free citizens. Therefore instead of sending subsidies to Poland, the EU would better allow polish plumbers in, where they could fill the gap.



So the beneficial alternative to the political integration of Europe is that the EU should let the people of the different nations of Europe trade freely with the rest of the world and o-operate intensively with each other within Europe. Europe should not protect the borders against goods or it will have to protect them against migrants. If goods cannot move, people will move, and conflicts will arise. Free trade is the best way to enhance the peace and the riches among the nations of Europe. The result will be efficient co-operation in common interests, more growth, less bureaucracy, and last but not least freer and happier citizens.

Most importantly however, markets for all products and services have to be opened symmetrically and synchronously. When markets are opened for particular goods and services only, and remain closed for other products or services, the unprotected sectors face distorted competition and an impossible uphill battle against foreign competition. Unprotected sectors rely on local goods and services from the protected sectors in their production processes charging uncompetitive prices. Consequently unsynchronised opening of markets leads to distorted competition.

This is the reason why unsynchronised opening world markets has lead to so many delocalisations and social drama in the developed countries. The exposure of particular sectors of industry to world-wide competition, whilst their subcontractors continued to enjoy protection has in fact resulted in abandoning whole sectors of unprotected industry. This mishandling of the globalisation process has lead to misallocation of recourses in favour of the protected sectors, and to loss of most of the advantages of globalisation. Rather than deepening the process of opening world markets for a limited number of abandoned sectors, such as textiles, agriculture, furniture or shoes, opening of world markets must be realised through widening the process to all sectors, including the public as well as private service industry.

## 4.5 The Euro: the Gamble with People's Prosperity that went terribly wrong.

Another erroneous and economically most disastrous policy inspired by the haughty political ambition to catch up with the US, was the much too early introduction of a common currency.



1 California Dollar (1871)

In the US the introduction of the common US\$ was the result of a long process of gradual economical integration.<sup>3</sup> Being based on gold, the new common currency also enjoyed widespread international trust. Still even today the US is considered by many as too large and too differentiated for being an optimal currency area (UCA)<sup>4</sup>. Economists argue that the US would be much better off with a West and an East US\$.

In Europe the new currency was not gold-based, nor was the introduction of the Euro the result of a long integration process. It was introduced as a means to accelerate the integration; as a means to put pressure on participating nations to converge their economic policies.

By reversing the natural order of events, politicians took the biggest gamble with prosperity of a whole continent ever. The regression confirms that this much too early introduction of the Euro has disastrous effects for Europe's growth. All other things equal, countries having stayed outside the EMU, have significantly higher growth estimated by the regression analysis at 2.57%.

The deflationary effects of the stabilisation pact and the haughty Euro/Dollar exchange rate at which the Euro was launched can explain the massive negative growth effect only very partially. The main reason lies in the application of a common monetary policy to countries being insufficiently synchronized. The convergence resulting from the stabilization pact has indeed proved unsustainable. Due to the different exposure to externalities such as oil prices, interest rates, international business climate, the convergence has stopped and EU economies are gradually diverging again.



The encompassing impact of the common currency has often been understated, if not disguised by the authorities. The introduction of a common currency does indeed imply more profound consequences than only a change of the colour and numbers on our pay-bills; Above all a common currency implies a common central bank and a common monetary policy. At the moment of the introduction of the Euro, Ireland grew at the fabulous pace of 11%, Italy at a rate of 1,7% only. Under these circumstances an exactly opposite monetary policy for both countries was appropriate. Still politics decided to launch the Euro anyway, implying a common monetary policy for all.

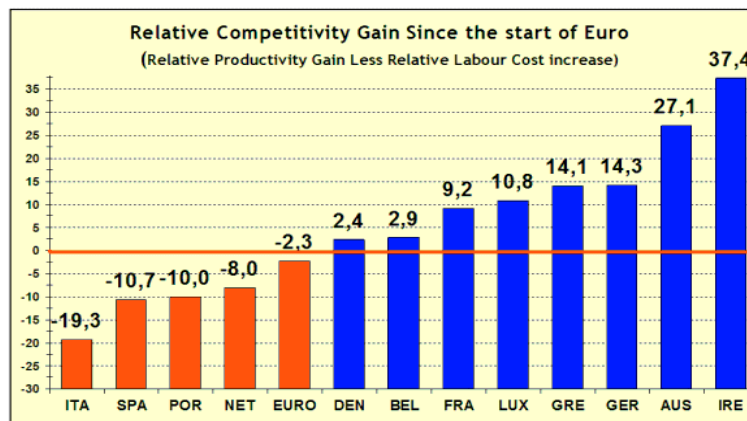
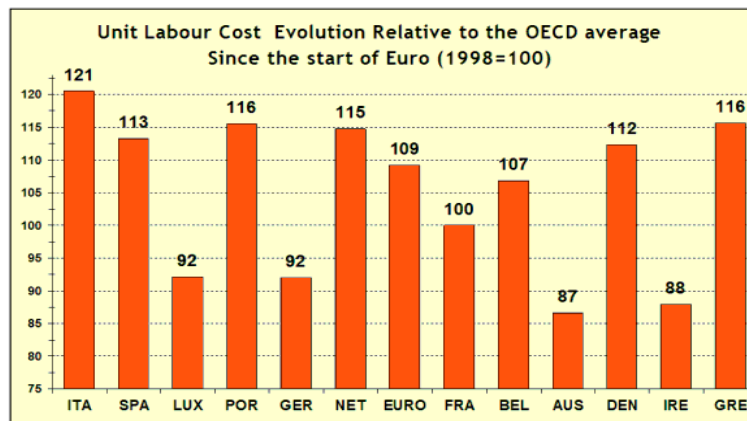
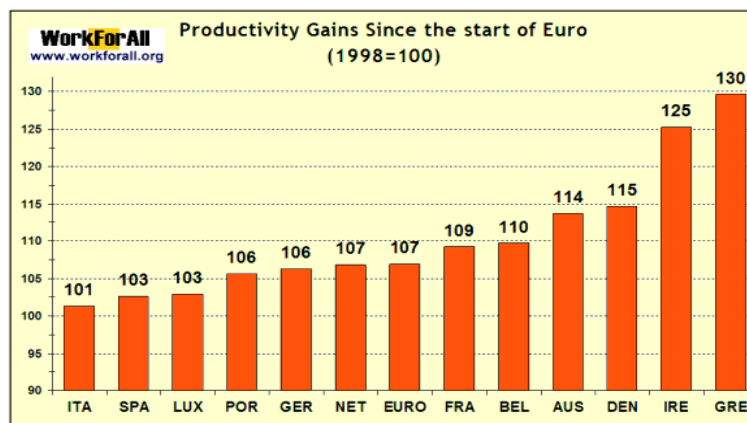
<sup>3</sup> <http://www.rebelstatescurrency.com/> [http://en.wikipedia.org/wiki/Confederate\\_States\\_of\\_America\\_dollar#References](http://en.wikipedia.org/wiki/Confederate_States_of_America_dollar#References)

<sup>4</sup> [http://en.wikipedia.org/wiki/Optimal\\_currency\\_area](http://en.wikipedia.org/wiki/Optimal_currency_area)

Today the consequences of this political gamble disregarding economical reality are dramatic. 7 years only after the launch of common currency, European economies have seriously grown apart. In just 7 years a fast modernising country like Ireland gained 37% in competitiveness relative to the OECD average, whilst Italy lost 19%. This adds up to an intra-monetary union difference in competitiveness gain of 57%.

In a system with national currencies the Lira would have continued its long term tradition of depreciations and Italy would have maintained its competitiveness. With this option now excluded, and international labour mobility lacking Italy faces the risk of a deep depression if it stays inside the EMS. Italians seem indeed not easily inclined to leave their sunny peninsula for the sake of finding good jobs elsewhere.

Ireland on the contrary till today has continued to boom, with inflationary pressures increasing. The most visible signs are house prices, blown up by much too low interest rates for a booming economy. But inflation is now also on the rise in consumer goods. Unable to set interest rates at an appropriate level for its fast growth, Ireland now risks run-away inflation, and a sudden and sad end to its uninterrupted quarter century success-story of fabulous growth.

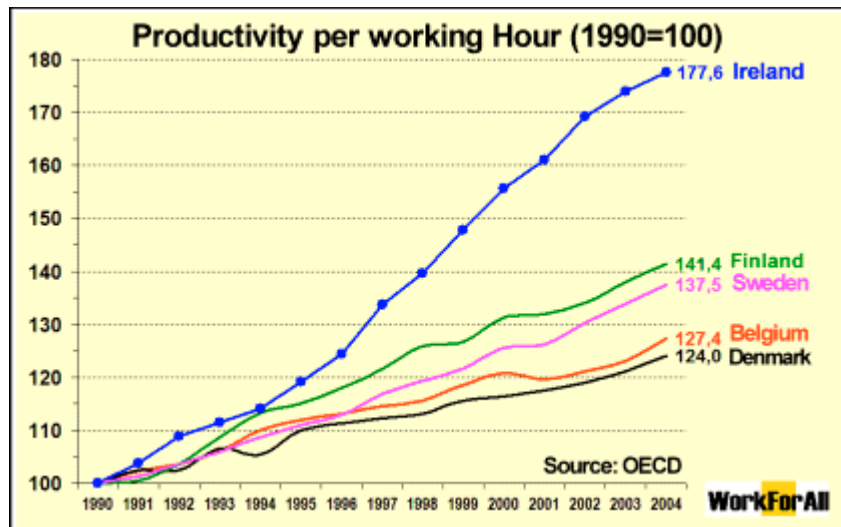


## 5. Demotivation.

Besides the 4 previous growth killers, the regression also found a few other remarkable results. As intuition suggests, longer working hours could significantly boost Europe's growth. However a full percent of longer working hours does not result in a full % of more wealth as one could reasonably expect. Although the growth effect is significant, the effect appears to be remarkably limited. The regression analysis suggest that countries with 1% longer working hours have less than 0,3% higher growth rates.

Facing the challenges of aging populations, most European countries consider increasing participation rates as a means of financing their social engagements. Denmark was one of the first countries to launch an activation program with rather strict reduction of the access to unemployment benefits, and a drastic limitation of the entitlements in time. Other countries are closely monitoring the Danish experiments. However the regression results suggest that the success of government imposed "activation programs" such as under the Danish model are most likely to yield more limited results than generally expected when no new jobs are on offer.

Due to these draconian measures, Denmark has indeed succeeded to reduce unemployment, but the wealth effects are hardly noticeable. Increasing pressure on unemployed or the old to accept jobs without new productive jobs on offer, results in the unemployed to have to accept low productive jobs with low job satisfaction. Such activation strategy consequently go at the expense not only of average labour productivity, but also ever lower job satisfaction and motivation, resulting ultimately in lower than proportional GDP growth. Higher sickness absenteeism is often the price to pay, as well poor motivation at the job. Consequently hours per employed person are already significantly lower in Scandinavia (1590 hours only vs. 1644 in continental Europe), and also productivity per hour worked is lagging behind.



Apparently increasing participation rates is not enough to create prosperity. Jobs must be productive and provide adequate job satisfaction, as well as a substantial financial remuneration in comparison to unemployment benefits. Wealthy Europeans have indeed become rather self-complacent. The regression indeed also confirms the intuition that countries with a high level of prosperity at the beginning of the investigated period (1984) had significantly slower growth rates. This effect can only very partly be explained by decreasing marginal productivity of investment. The effect must rather be explained by an increasing consumer preference for leisure at the expense of financial remuneration when prosperity progresses. For reactivation plans to be successful, rather than on obliging citizens to accept jobs they do not want, quantity and quality of the jobs on offer are to be increased. Attracting foreign and domestic investment though lower taxes on profits seems the only logical way how to achieve this.

## 6. Welfare excesses:

The regression analyses identified excessive public spending as by far the most important growth and job killer. Probably the main reason why public spending is so harmful to growth and job creation is that the biggest share of government spending ends up in consumption; either in direct consumption by the authorities, either in consumption of the beneficiaries of social benefits. In doing so the Government is skimming off excessive resources from the private sector where a much larger part would have ended up in productive investment and in the creation of productive jobs.

However not all public spending is equally harmful for growth. Even in well-developed countries public investment such as in missing links in the infrastructure might even cause productivity gains that are by far greater than any private investment. The regression found indeed confirmation of the intuition that not only the amount of public spending but also the way public money is spent has highly significant effects on growth.

The regression found that governments spending a larger proportion of their budgets in social expenditures have significantly slower growth rates. Obviously the optimal amount of redistribution through the welfare system seems to be exceeded, and this misallocation of public resources leads to lower growth. The most typical misallocation in social spending is when excessive unemployment benefits are too close to the lowest wages and cause the "unemployment trap". Often the combination of high average taxation, with strongly progressive tax structure, and high unemployment benefits even result in negative net compensation of labour. Rather than preventing exclusion and promoting self-reliance, such a social model provides incentives to leave the productive sector, and eventually leads to lower production of wealth and to smaller job creation.

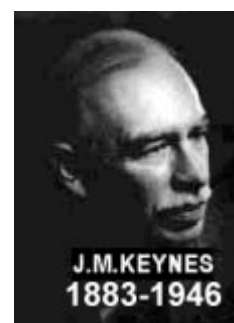
The question is also whether the present form of social security is still adapted to today's social needs. The progress of prosperity over the last century has progressively reduced poverty and in doing so increased people's self-reliance capacity, progressively making all least part of the social overhead redundant. The newly acquired freedom from want progressively give rise to new non-material and more existential needs such as moral pride in self-determination, self realisation and in earning one's own living. These immaterial needs can not be satisfied by the present form of social security as social security are not valuable substitutes for social networks, nor for self pride.

On the contrary, big-government "nanny-states" tend to amplify these immaterial needs rather than satisfy them, and in doing so rob the individual from his most existential values as free and independent being, adding to psychological imbalance and existential discontent. High suicide rates and incidence of depressions, so common in big-government states countries may be very closely related to this most fundamental and existential imbalance. Pruning redundant social overhead can help to modernise social system, redirect its recourses to the essential social needs, and help to save at least the essentials of our social system.

## 7. Keynesian Fallacy.

The last but not the least (long term) growth killers is the use of Keynesian economic policy as a remedy against economic slowdown. Stimulating consumption simply does not work. On the contrary such Keynesian policy of stimulating consumption through low interest rates or deficit spending only tends to lay the basis for the next economic downturn. Nor low interest rates, nor deficit spending can bring about a sustainable recovery; as such growth is "bought on credit". Any credit expansion sooner or later bounces on the sustainability limits of debt, and any surplus growth realised during the credit expansion goes at the expense of lower growth later, whenever debt must be reduced.

Ever since Keynes launched his "general theory" during the great depression, slow growth has naively been diagnosed as overproduction and/or the consequence of scarcity of money. Both Keynesian diagnoses are fallacies. There is no such thing as a general overproduction. All production provides income to those having contributed to the production, and this purchasing power cannot but be spent either in new consumption either in investment though saving. At the most relative overproduction can subsist for some time: this is the overproduction of one commodity corresponding to underproduction of another. This happens when entrepreneurs are slow in noticing market signals and adapting to new consumer preferences. Particularly in (semi-) planned economies faraway planners often lack the feeling with markets, and often redirect excessive resources to the production of produce that have become redundant or outdated, often causing giant overproduction. Against relative overproduction, only the process of creative destruction, eliminating outdated production capacity, and freeing resources for new activities can help. Most certainly easy money does not. Consumers do not buy outdated or redundant products however low interest rates may fall.



Nor is there any such thing as general scarcity of money. Money is merely an intermediary trading tool, helping to trade labour or whatever commodity against another. However plenty or scarce this intermediary trading tool might be, it has no effect on the available stock of labour, commodities or wealth. Having no effect on the availability of commodities, more money will have the only effect of raising prices of the available stock of goods and services.

In other words it is an illusion that printing more money can create more wealth or growth. Nor can lower interest rates or expanding the money supply beyond the growth rate of the real economy. There is no such thing as a free lunch. Wealth can only be created through the production of more goods and services. Even the Romans knew this: sine labor nihil.

The regression analysis confirms that both deficit spending and lowering interest rates have limited (short term) positive impact on growth. Although the impact is statistically significant, the magnitude is limited, and above all, outmatched by the negative secondary effects through inflation and increasing indebtedness. Moreover any surplus growth created during the credit expansion comes at the expense of wealth created when debt has reached the limits of sustainability and debt must be reduced.

As a conclusion, one can reasonably state that Keynesian policies are counterproductive in restoring growth. Decades of Keynesian policies have left Europe with an unsustainable public debt level. Europe's welfare state and particularly its pension schemes are built on the credit of next generations, who did not consent to the wastefulness. Precisely the lack of consent with this immoral negligence may be the most serious threat to the stability of Europe's social system.

The only countries that have succeeded in escaping from this negative debt spiral and in restoring growth were countries that have drastically broken with the Keynesian traditions. They drastically reduced the size of government both as to the level of spending as to the level of regulation. That is the first step to growth, rather than to start with reducing the level of taxes. Reducing tax revenues without a commensurate reduction of public spending only shifts the burden of current spending to future generations, including our children and grandchildren. Ireland has proven that reducing government can be done and showed us the way to do it.

## Comparison with Other Studies

Having identified the 7 European growth killers, we refer to Appendix 1 for a profound comparison of the main results of this regression with the results of similar empirical studies. As to taxation policy all serious studies analysing growth effects of government spending and different tax structures lead to similar empirical findings:

- Government spending above the optimal level causes significant growth slowdown.
- Direct taxes on income are the most distortionate taxes causing most harm to growth.
- A shift from direct taxes to consumption taxes can boost growth prospects

Generally speaking our investigation found empirical results with higher significance and higher absolute values of the regression coefficients than most prior studies. This is due to:

- The large number of and the unique selection of relevant independent variables determining growth. A larger number of determining factors obviously allows explaining growth with higher precision than studies considering fewer determining factors only.
- Our investigation is confined to the relative homogeneous group of European welfare states.
- Our investigation was confined to the time period since 1985, during which public spending was above the optimal level over the whole investigated period. Most prior growth models have been considering vast periods from 1970 to 2003, during which both government under-spending and overspending have been co-existing. As a result, positive and negative growth effects of government spending on both sides of the Armeiy-optimum have been compensating in the linear regressions. This has resulted in grossly underestimated coefficients and significance of the growth effect of government spending in prior growth models.

## Simulations at Different Sizes of Governments (Belgian Case)

The regression analysis identified the size of government as the single most important growth killer. On basis of the elasticity's found in the regression we can conclude that wealth growth is correlated negatively with the size of the government spending in the countries examined. On basis these elasticity's simulations can be established of the prosperity growth as a consequence of reducing government spending. Table www gives simulations at reduced levels of government spending of respectively 5 and 10% of the GNP. Even with a safety margin of half of the elasticity only of the value found in the regression, the long-term growth effects are remarkable.

A decrease in government spending with 10% results in prosperity growth after 20 year with 283% contrary to the prosperity growth of 41% only when policy remains unaltered. More remarkably one notes that also the tax receipts in absolute terms drastically increase although their relative share decreased by 10%. This is of course related to the enlarging taxable base in booming economies. Unaltered taxation policies on the contrary leads to slower prosperity growth prospects due to both the high tax burden demotivating active contribution to the economic cycle as well as the lack of resources in the private for maximising its wealth creating potential.

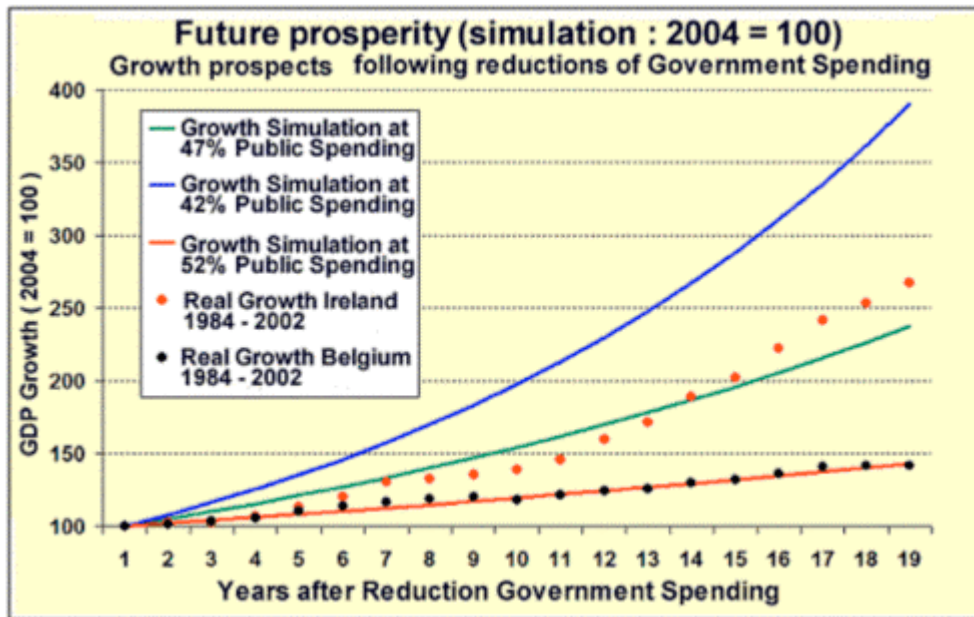
**Elasticity GNP / Government Spending = - 0,52 (half of the possible elasticity found in the regression)**

**5% Decrease in public Spending resulting in 2,60% supplementary growth rate**

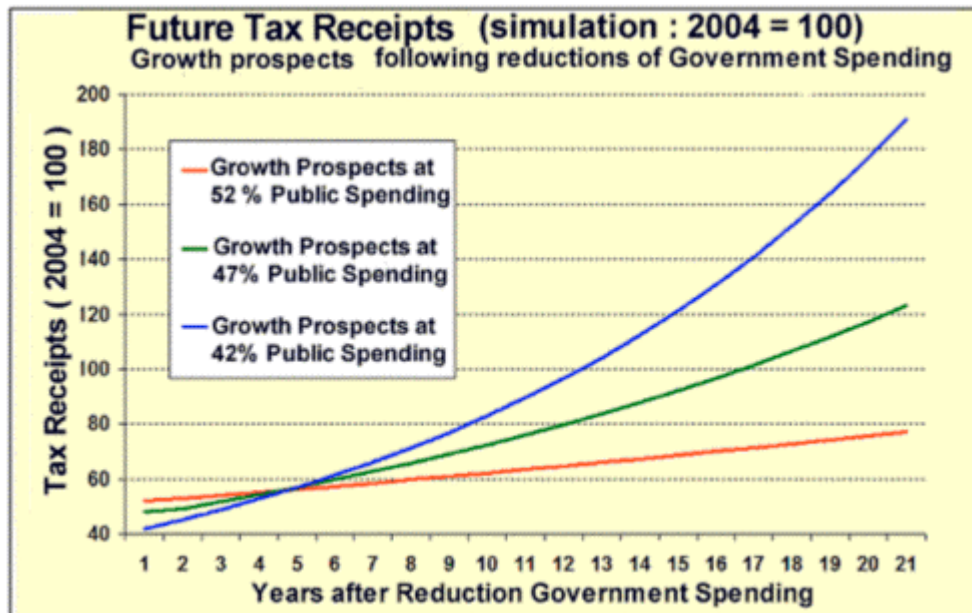
**10 % Decrease in public Spending resulting in 5,20% supplementary growth rate**

Effects of decrease in Public Spending on GNP en Tax receipts						
Year	Unchanged Policy 52% GNP		Public Spending 47%GNP		Public Spending 42%GNP	
	GNP	Tax Receipts	GNP	Tax Receipts	GNP	Tax Receipts
Rate:	1,75%	52,00%	4,35%	47,00%	6,95%	42,00%
2004	101,75	52,91	104,35	49,04	106,95	44,92
2005	103,53	53,84	108,89	51,18	114,38	48,04
2006	105,34	54,78	113,63	53,40	122,33	51,38
2007	107,19	55,74	118,57	55,73	130,83	54,95
2008	109,06	56,71	123,73	58,15	139,93	58,77
2009	110,97	57,70	129,11	60,68	149,65	62,85
2010	112,91	58,71	134,72	63,32	160,05	67,22
2011	114,89	59,74	140,59	66,08	171,18	71,89
2012	116,90	60,79	146,70	68,95	183,07	76,89
2013	118,94	61,85	153,08	71,95	195,80	82,24
2014	121,03	62,93	159,74	75,08	209,41	87,95
2015	123,14	64,03	166,69	78,34	223,96	94,06
2016	125,30	65,16	173,94	81,75	239,52	100,60
2017	127,49	66,30	181,51	85,31	256,17	107,59
2018	129,72	67,46	189,40	89,02	273,98	115,07
2019	131,99	68,64	197,64	92,89	293,02	123,07
2020	134,30	69,84	206,24	96,93	313,38	131,62
2021	136,65	71,06	215,21	101,15	335,16	140,77
2022	139,04	72,30	224,57	105,55	358,46	150,55
2023	141,48	73,57	234,34	110,14	383,37	161,01

## Simulations at Different Sizes of Governments



Thanks to the increased growth rate Tax receipts already after 4 year exceed tax receipts received when policies are unchanged. After 20-year tax receipts even amount 3 times the receipts in case of unchanged tax policy. This means 3 times as much resources for financing public environmental, social or cultural initiatives, or for financing the increasing pension burden.





## Abstract

European countries have comparable states of industrial development, productivity, knowledge level and labour ethics. Yet economic performances differ notably. While economies like France and Belgium slowly progressed with 38% and 42% only from 1984 to 2002, Ireland's wealth grew at 4 times faster rate by no less than 167% over the same 18 year period. In barely half a generation Ireland evolved from the second poorest to the second richest country of Europe. The differences in new job creation are similar. The cause of these growth differences is found in different macro-economic public policy rather than in micro-economic differences between citizens and businesses.

### PART 1 - The Economics of Taxation

In a first part of this paper, we discuss the newest developments in macro-economic theory and taxation policies. We have special attention for theory relative to optimising tax receipts by Laffer (1985) and the Barro-Army theories (1990-1995) concerning optimising prosperity growth and income distribution. We compare the taxation policies in different social models, and have particular interest whether the Scandinavian model is suited for maximizing growth and creating new jobs.

### PART 2 - The Causes of Growth Differentials: Empirical Research

In the second part we search for the causes of European growth differentials by means of multiple regression. The main conclusion is that two factors of the public policy mix cause weak growth performances: excessive taxation and a demotivating tax structure, on the one hand, and over consumption with a lack of savings and investment on the other hand. We conclude that the public sector in most European countries is far too large, leaving the private sector with too little recourse for it to achieve its potential wealth creation.

### PART 3 - Ireland versus Belgium : A Case Study

In part three we make a case study and analyse performances of two countries with opposite public policies: Ireland's with low public spending and a flat tax structure and Belgium with high levels of public spending and a heavy direct tax burden. We analyse the effects on growth, budget, public debt, job creation and social expenditure. We conclude that only stimulation of the supply-side of the economy rescue Europe's generous social system and provide sustainable recourses for the challenges of its fast ageing population. This confirms the overwhelming importance of production and investment as the prime social objective.

### Part 4 - Loosing Overweight: A slimming Cure for fat Governments.

In part four, we look at possible scenarios on how to reduce the public spending as the most effective way to restore dynamism and growth. On the basis of simulations we investigate the possibilities and consequences of a budget-freeze in real terms. We analyse whether pruning bureaucracy and the parasitical sector can free resources and return our workforce to its real task of creating wealth, and ultimately restore efficiency and competitiveness of both private and public sector.

**DOWNLOAD PART 3 Ireland versus Belgium : A Case Study**

<http://workforall.net/Case-Study-Ireland-versus-Belgium.pdf>