

To Consume or to Save?

The Right Strategy for a Sustainable Future

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Stanimir Pavlinov Pachev,

E-mail: stanimir_bg@hotmail.com

International Economic Relations major (4th year),

Academy of Economics “D.A.Tsenov”, Svishtov

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“One must choose, in life, between making money and spending it. There's no time to do both.”

Edouard Bourdet

Consume, urged Keynes and so it was. The great flood of Keynesians spread over the world and it was good. Governments started expanding the welfare state, the people started consuming an ever increasing amount of houses, durable goods and services. Trade flourished and the great flattening of the world commenced. A Great Depression so devastating and crippling was over and not likely to come back. All thanks to the idea that increases of consumption by government policies or funds can soften a crisis and even prevent them. Saving and the protestant work ethics were slowly discarded as unrealistic and pertaining to the aging breed of classical economists. Capital accumulation, efficiency and free markets were no longer sufficient conditions for economic growth. Government involvement in the economy, spending and consumption were seen as the new determinants of prosperity.

Despite the big change in economic mood, we should not discard saving as a vital part of individual and national prosperity. Today, we see the growing concern with the pension funds solvency, uncontrolled welfare programs like state-run medical insurance and the bleak prospects of having just 2 working people per retiree in 2050ⁱ. Consumption on a government level has led to the removal of the “governments can’t go bankrupt” phrase from textbooks and Greece’s prospects are worsening. To solve these problems we need to think if consumption is that bad and can saving more improve individuals’ lives and countries’ growth.

Happiness, happiness – should I buy this car or open a deposit account

The dilemma of whether individuals should consume or save is widely discussed in intertemporal economics. To start with there is Irvin Fisher’s model of intertemporal consumption. The renowned neoclassical economist argues that an individual’s choice of saving or consuming depends on his or hers personality and the income he expects to receive. Suppose Mr. Consumer has a current income of \$6000 and further \$7000, which he will receive with certainty due to his job as a professor (who tend never to get fired) next year. The certainty of this income means Mr. Consumer can gladly take out a loan, which will be limited to the present value of his future salary. Whether he consumes his current salary only, his future one as well or some compromise will depend on the utility he gets from consumption or saving. If Mr. Consumer enjoys buying a new car or going to a vacation to Northern Italy, he will consume more and save less. Of course the interest rate of the loan limits what he can consume now, leaving our professor with just a new car and no vacation. A

high interest rate argues Fisher will stimulate savings so that next year Mr. Consumer might afford to go to Dubai instead of Italy. Although common sense says so, interest rates might not have that big an influence on saving patterns in reality. Balassa (1989)ⁱⁱ argues that an increase in interest rates doesn't lead to higher savings. While higher interest rates lead people to save more (substitution effect), the increase in interest income stimulates them to spend and consume an equal amount (income effect). Both of these effects, says Balassa, cancel each other out and as a result higher interest rates don't lead to higher savings. Bulgaria's no different – saving rates and real interest rates do not move together (Chart 1).

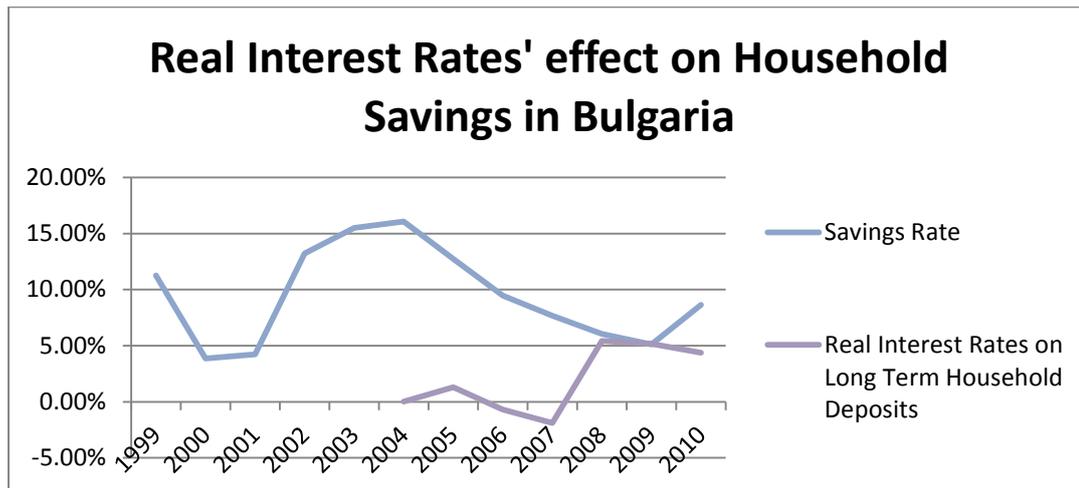


Chart 1 Real Interest Rates effect on Savings in Bulgariaⁱⁱⁱ

If interest rates don't have a big impact on intertemporal preferences, personal qualities do. The choice of consuming or saving depends on individual qualities like foresight, self control and habit as well. Why, the professor might even decide to bequest a large sum of money to the university and limit his consumption.

As illuminating as Fisher's model is, it doesn't take into account how a person's saving and consumption habits change with age. Enter the Life-Cycle Income Hypothesis. In 1950 Franco Modigliani developed a hypothesis that people's choice of consumption or saving is determined by their stage in life. To make a point clear, assume two people – Mr. Consumer and Mr. Saver. Mr. Consumer as you already know is prone to spending more, while Mr. Saver, the new professor at university, gets a greater utility from saving. Early in their academic careers, they will need more money for a car, a house and of course new books. At this stage in life their salaries will tend to be towards the bottom end of the pay scale as they have little experience (Let's say \$12000 per annum). Therefore they will spend more than their income (that is they will borrow). On Chart 2 we can see that they both spend more than their earnings (Mr. Consumer spends more than Mr. Saver of course). As they progress in life and impart more knowledge on their students, their incomes will increase. Barring a middle age crisis, their expenditures will stay relatively the same as people prefer stability rather than a feast-famine rollercoaster. The difference between what they get paid and what they consume is saved in a savings account. Charts 2 and 3 show the balance (wealth) in their savings account and their annual savings. Near retirement age their income starts to fall due to a lack of enough classes and as younger and more energetic professors get

hired. Wealth on the other hand increases. After retirement Mr. Saver and Mr. Consumer start drawing on their savings to match the shortfall between earnings and expenditures.

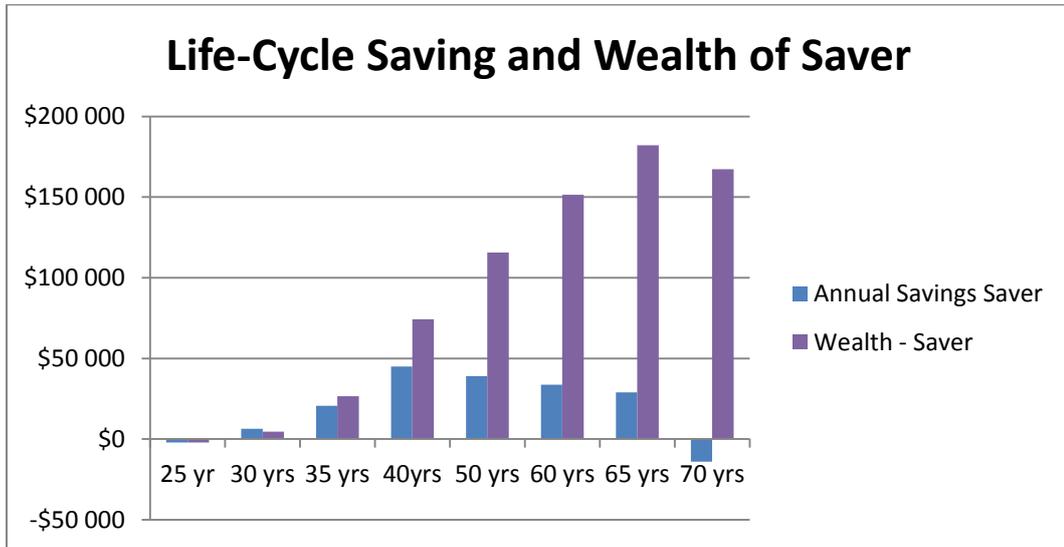


Chart 2 Savings and Accumulated Wealth of Mr. Saver

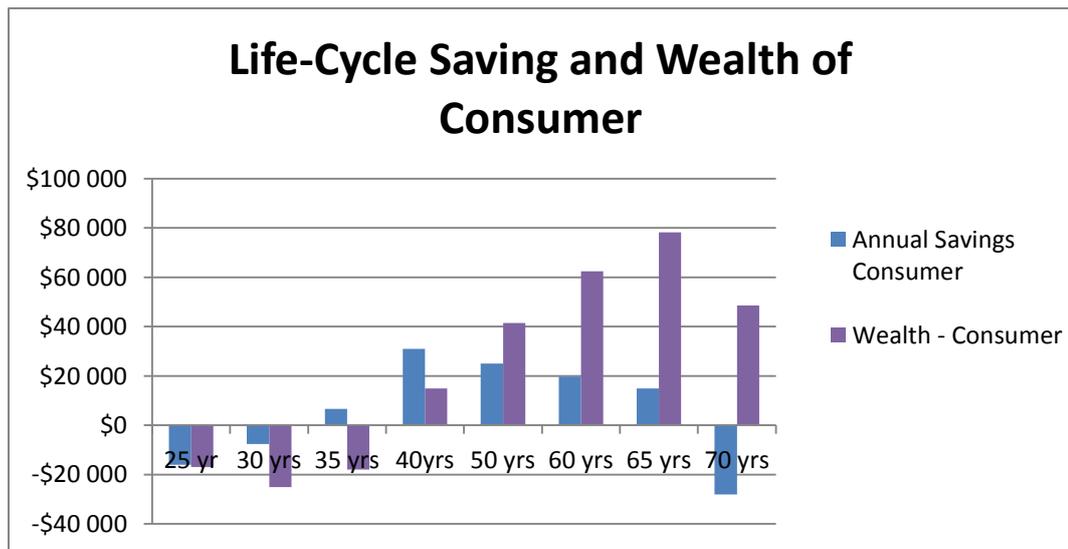


Chart 3 Savings and Accumulated Wealth of Mr. Consumer

Evidently whether to save or consume will depend on the person’s values and lifestyle as well as on his stage in life. The aim of saving of course is to have sufficient wealth for retirement. Whether it is a government-mandated withholding tax on their salary or a voluntary contribution to a savings account, people save mainly for retirement. Or so Modigliani argues.

There is evidence however, that retirement is not the only savings motive. Cagetti (2003)^{iv} shows that people save mainly as a safety cushion against unforeseen circumstances. As he points out in his research, precautionary savings outweighs savings for retirement, education and vacation. Only later in life is retirement seen as worthy of big savings.

It appears that a preferable strategy is subjective and it depends on the person's utility functions. Both professors are quite happy with themselves. Mr. Saver consumes less and will have more wealth throughout his lifetime, while Mr. Consumer will indulge in worldly pleasures, but consequently have less to spend in case of an emergency. Everyday life proves the subjectivity of the dilemma too. We all know people who consume more than average, but the ones going bankrupt and losing absolutely everything are rare.

So far, we have dealt with a single person's consumption/savings dilemma. However as an article in *Scientific American*, a famous US science magazine, says "...the Law of Large Numbers shows that an event with a low probability of occurrence in a small number of trials has a high probability of occurrence in a large number of trials"^v.

Curbing the Public Sector – or why governments should consume less

Talking about individual spending/savings strategies is fair enough. We need to, however, look at why governments consume (spend) to get the whole picture. Government spending levels like today's are in the long-run not sustainable. In addition, they hamper the competitive spirit of a nation, reduce efficiency and arbitrarily redistribute income to whomever deemed fit.

To begin with, a reduction of a government's consumption of services and goods decreases expenditures, which leads to improved ratings. When calculating the price of government bonds investors will look at many factors. The coupon of the bond (the higher the better), the maturity (the longer the riskier and hence less attractive) and of course the default risk of the issuer are all taken into consideration. A price is put on all of these factors and the final price of the bond must deduct the factor costs. When governments start to increase their spending, they find tax raises unpopular, so debt financing becomes a big source of funds. They borrow extensively, not spending the money on NPV-positive (i.e. Net Present Value) projects and the result is in even greater need of funds. This eventually leads to a decreased credit rating, which means investors put a higher price on the risk of default. Consequently, when Greece wants to sell bonds for €10 million, dealers at the auctions will bid less and the Greek government will be left with just €7 million instead. This means budget deficits and eventually austerity "packages" for the people. That is not the only disadvantage of government consumption.

Lower costs of borrowing are desirable indeed, but reducing government expenditures means less taxes. Reduced taxes means households have more disposable income to spend. Undoubtedly, Keynesians will protest that government spending can increase overall spending and give a boost to household consumption. Here steps in Ricardo. David Ricardo's financial experience and economic knowledge led him to observe that when governments increase their expenditures, people expect a future increase in taxes. As a result, they decrease their consumption (by the amount of the expected taxes) and start saving. Not only that, but their confidence in the future is reduced. This phenomenon is known as Ricardian Equivalence. Classical economists are not out of fashion after all.

Although not a technical one, economics is still a science and there is plenty of empirical evidence on why increasing state expenditures is not the best option for boosting growth. Djankov and Angelov (2009)^{vi} argue that a decrease in government payroll taxes and spending can have a better effect on an economy in crisis than traditional stimulus packages. Their research shows that a 7.5% reduction in payroll taxes (from 31.3% to 23.8%) in Bulgaria will create 130,000 jobs and will increase GDP growth by half a percent. The measure, say the authors, will decrease the size of the shadow economy and leave people with more income to spend. More evidence is available though.

Kormend and Meguire (1985)^{vii} examine 47 countries in the post-WWII period and find that there is no relationship between average growth rate of GDP and average growth rate of government expenditures relative to GDP. Garier and Tullock (1987)^{viii} expand the number of countries to 115 and find a negative correlation between average economic growth and average government consumption as a percentage of GDP. Finally, Barro (1988) proves that an increase of government consumption lowers the GDP growth rate, because as governments spend more money, they don't increase private sector productivity, but raise income taxes. The arguments for the less-consumption strategy are plenty.

As clear as the above evidence is, critics might argue that Keynesian economics helped the U.S. and the world fight off the Great Depression. John M. Keynes's ideas, incorporated into F.D. Roosevelt's New Deal, say Keynesians, led the country out of the depression with a blend of direct government expenditures and various work programs (Work Progress Program, etc.). In "American Economic History"^{ix} Jonathan Hughes shows that the New Deal had little effects on GDP and employment and that the massive reduction in unemployment was the result of the United States entering the Second World War. This view is shared by Wall Street Journal columnists Burton and Anita Folson^x, who similarly argue that the start of the war marked the reduction in unemployment and the end of the Great Depression.

The implications of the chosen strategy (consume more or save more) on the individual level are not significant to argue definitely for greater consumption or saving. Once we look at the whole population, however, it is clear that profligate consumption is not sustainable in the long-run and rarely contributes to efficiency gains. As Samuel Johnson, the famous British poet, put it "without frugality none can be rich, and with it very few would be poor".

ⁱ <http://www.vesti.bg/index.phtml?tid=40&oid=4007251>

ⁱⁱ Balassa, B. "The effects of interest rates on savings in developing countries", Working Paper 56, World Bank (1989)

ⁱⁱⁱ Data for savings rate are from www.nsi.bg and data on interest rates are from www.bnb.bg

^{iv} Cagetti, M. "Wealth Accumulation over the life cycle and precautionary savings", Journal of Business and Economic Statistics (July 2003)

^v "Miracle on Probability Street", Scientific American (August 2004 issue)

^{vi} <http://content.imamu.edu.sa/Scholars/it/net/tax-stimulus-as-crisis-response-18012009.pdf>

^{vii} Kormendi, R. and Meguire, P., “Macroeconomic determinants of growth”, *Journal of Monetary Economics* (Sept. 1985)

^{viii} Garier, K and Tullock, G., “An empirical analysis of cross-national economic growth”, (unpublished) California Institute of Technology (1987)

^{ix} Hughes, J. “American Economic History” (8th edition), Prentice hall (2010)

^x <http://online.wsj.com/article/SB10001424052702304024604575173632046893848.html>