

## When Capital Becomes Like Salt

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*Salt used to be more valuable than gold. But now with deeper mining we are able to access beds of salt up to 350 meters thick relatively close to the surface. With capital investment in large mines, salt is now thrown away on streets to aid motorists. Like salt, money and the interest charged for the use of money is becoming a very low cost commodity. While the process that is driving this cost reduction in capital is more complex than the investment process that drove the price of salt to nearly nothing, this cost reduction in interest is having a major effect on investment, government control of the economy, growth and economic planning of individuals. This paper discusses six different factors that will greatly affect the supply and demand for money in the near future: demographics, income growth, continued health improvements, continued government deficits, changes in the population controlling savings, and decreasing faith in government and company pensions. The real question is how will large numbers of third world savers, in numbers far larger than ever seen before, affect the supply of savings? Driven by health improvements (making the concept of retirement a viable dream for billions of people), improved economic opportunity, and smaller extended families (that used to provided traditional "retirement"), the sheer number of new savers could result in capital as cheap as salt.*

*"The difficulty lies, not in the new ideas, but in escaping the old ones, which ramify, for those brought up as most of us have been, into every corner of our minds".*  
John Maynard Keynes

*"The great events of history are often due to secular changes in the growth of population and other fundamental economic causes, which, escaping by their gradual character the notice of contemporary observers, are attributed to the follies of statesmen or the fanaticism of atheists." Keynes, (1919), Chapter II, Section I, pg.14-15, *The Economic Consequences of the Peace**

### INTRODUCTION

Salt used to be more valuable than gold. But now with deeper mining we are able to access beds of salt up to 350 meters thick relatively close to the surface. With capital investment in large mines, salt is now thrown away on streets to aid motorists. Like salt, money and the interest charged for the use of money is becoming a very low cost commodity. While the process that is driving this cost reduction in capital is more complex than the investment process that drove the price of salt to nearly nothing, this cost reduction in interest is having a major effect on investment, government control of the economy, growth and economic planning of individuals.

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### Past Economic Growth and Saving

The unprecedented wealth growth of the world in the past two centuries has outdone any prior economic growth in history. (Clark, (2007), Page 2) Prior to this period the slow and occasional improvements in technology did little except increase the population which then drove down wages. Clark feels that the key reason wealth begin to increase so quickly was because of the rate at which new technology became available, overcoming the former Malthusian trap of increased wages merely leading to larger families, which lead to lower wages. The rate of progress was the important factor, not just the existence of new technology.

These increases in wealth also lead to a major change in population growth, the demographic transition. This transition was a change to smaller families which converted the increased wealth from the new technology into increased income per capita. Higher income per capita can lead to increased savings.

**FIGURE 1**  
**WORLD ECONOMIC HISTORY**

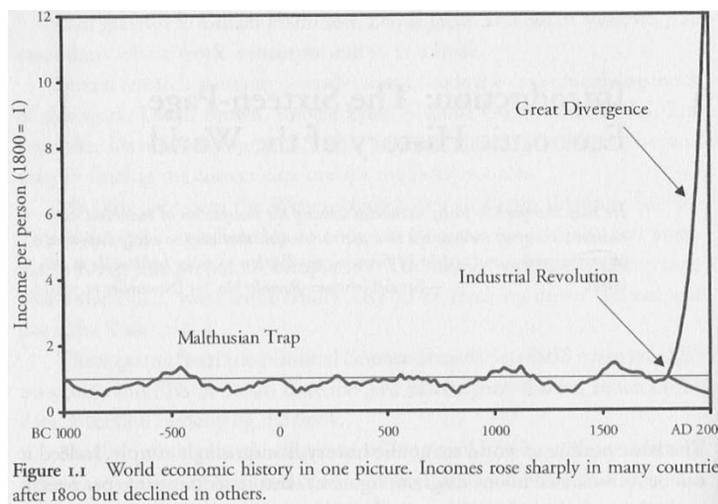


Figure 1.1 World economic history in one picture. Incomes rose sharply in many countries after 1800 but declined in others.

(Clark (2007), page 2)

This growth was driven by the application of capital in the form of machinery, infrastructure development, and research and application of new technologies. Clark also points out that the widespread education of the very prolific upper class (prior to the Industrial Revolution) pushed educated wealthy people into the working population at large at a time when poorer people were having much smaller families. As the Industrial Revolution continued families of the wealthy grew smaller.

The funding for the industrial revolution in England was only possible because of the surplus savings of a very small population of investors that then controlled the relatively small amount of investments

made. England, a fairly small country population-wise and a second rate military power, became a world-wide empire, beating out far richer and larger countries.

The returns to these investments fueled the massive economic growth of the industrial revolution, and made England a world power for nearly two centuries. As a result of these relatively small surpluses invested in new technology, plant and infrastructure, the world of today has resulted.

This disproportionately small number of savers in a population continued past the middle of the twentieth century.

The growth of the world's economy for thirty years after World War II, for example, was driven mainly by the savings of less than 10% of the world's population (North America, Europe, and Australia/New Zealand). The percentage of people actually fueling this growth was smaller than 10% as much of the wealth of Europe and Japan was destroyed in WWII and thus economic efforts went to rebuilding war damage for a significant time after WWII.

Thus, these post-WWII savings, and resulting investments, were the result of a very small proportion of less than 10% of the world's population, adjusting for the loss of Japanese and European investors for up to twenty years, and the generally small number of investors in each country. In 1963 less than 5% of Americans owned stocks.

It is only since the early 1960's that savings has spread to wider group in these advanced nations' populations. The growth of mutual funds and similar pension type funds greatly expanded the pool of money as investors other than the rich began investing seriously in retirement funds, driven in part by increasing life spans. And, as Europe and Japan recovered from the war and finished with repairing their damaged economies, their savings became available for investments throughout the world.

In the post-WWII Keynesian world, control of the cost of renting these savings (the interest rate) through national banks or quasi-national institutions (i.e., the Federal Reserve) has allowed national governments to control in part the growth rate of their economies. Keynesian economics and later monetary policy emphasized the control of interest rates as a major tool for controlling the economy. But the control of a commodity, even money, is dependent on scarcity of the commodity. If the commodity is as available as salt, no control is possible.

This problem is further exasperated by the ability of capital to move easily across borders. No longer do sovereign states have control of the flows of capital in and out of their economies. The late 1990's problems in Thailand point to the reality of international capital flows.

With the collapse and underfunding of many state and corporate pension plans, individuals will have no other way to fund their retirements except by funding their own retirement plans. This trend toward individually controlled pension plans is fueled by the developing trend of holding numerous jobs during a work life, rolling over one's IRA either into the new company or more rationally self-managing the IRA. The resultant continual expansion of savings will further increase the supply of loan-able funds, further decreasing the cost of funds in the marketplace.

## **CHANGES IN THE ECONOMIC ENVIRONMENT OF DEVELOPING NATIONS**

Much of the savings potential in the third world has been stifled due to the high cost of housing that is not titled, and hence not a loan-able asset. As De Soto (2000) pointed out, there are plenty of assets in the third world. The problem is that property rights are not well established and hence housing is far more expensive and uncertain. This reduces the funds available to invest in infrastructure and the private sector and in the past has greatly reduced growth in third world countries.

This does appear to be changing as democracy increases in many third world countries and property rights are beginning to be recognized. But Toche (2003) suggests that consumers save based in part on current consumption and part on "habits" from past experience. Thus, in many cases increased growth appears to increase saving. In part this increased savings is driven by the expectation that many people will enjoy much longer life spans but in the same risky economic environment of their home country.

This increased life span will lead to increasing percentages of populations world-wide saving for pensions outside of traditional government or company sponsored pension funds, given the high risk of

failure of third world governments and state sponsored pensions over a (now expanded) lifespan. This will ensure that the cost of money remains low, especially if these available funds are in excess of the ability of employing these funds in economies. Even though the amount of savings per individual may be relatively small, the numbers of potential participants is huge.

While in the past economies could almost always absorb more investment, economies in the future will be at risk of inflation if they take on too much new investment. If inflation increases (and rates increase), the resultant higher interest rates will increase the inflow of funds into that economy from overseas, increasing the amount available for investment. This should drive rates down again, and also lead to instability as capital flows in and out of economies with little or no control by individual governments.

Given low interest rates all investors will also have to invest more and invest longer to have a viable retirement. Japanese savers reacted to low rates in Japan by saving more, increasing their savings rate from 25% to 40%. With increased life spans this will not be a problem, but will further contribute to keeping interest rates low. While the demand for capital will grow, the supply of capital from the entire world will ensure that interest rates stay low and capital approaches the cost of salt. The low cost of capital, as a result of the massive increase in savings (both in the first world and the third world) will also mean that governments can no longer control economies through interest rate manipulations.

### **Theories of Savings**

Numerous theories of saving have been developed in traditional western economic theory. Friedman (1957) postulated a permanent income hypothesis (PIH) that predicts consumers should save less when income growth is high as they look into the future and see higher salaries and wealth. The PIH would then predict higher savings rates in slow-growing economies versus fast growing economies.

Modigliani (1970) used a life cycle hypothesis (LCH) to explain saving behavior. He felt that “*consumer allocation to consumption at any age will depend only on life resources (the present value of labor income plus bequests received, if any) and not at all on income accruing currently.*” (Modigliani (1986), page 705)

### **The East Asia Experience**

Both the PIH and LCH have met some problems in dealing with Third World and Asian nations. The recent “high savings rate” in China have caused some serious rethinking of these ideas. Japan in the 1960-1970’s and Korea in the 1980-1990’s showed these high savings rates (up to 30% of earnings) and now China is demonstrating the same behavior. Wen (2009) posits that this contradictory behavior (from the viewpoint of the PIH) is due to the lack of banking system availability (borrowing constraints and uninsured risks); meaning people cannot use the banking system to carry them through times of low income. Hence they save as an emergency fund (“precautionary savings”).

While most models assume that savings drives growth (i.e., savings is necessary for investment to provide growth), Carroll et al (2000) suggest that in East Asian economies growth drives saving, the reverse of standard economic thought. Economies in East Asia had high rates of growth prior to high rates of savings. It appears in the west that this relationship holds on the downward side of growth. As productivity growth decreased and growth declined from the 1970’s to present in OECD countries, savings also went down.

What then drove the growth originally in these East Asian countries? The use of western savings for investments by companies moving to take advantage of lower labor rates at the time in East Asia could account for the initial growth. Hence the growth was driven by money from outside the East Asian economies initially, which lead to higher savings rates in East Asia due to the lack of adequate banking systems providing credit during down times.

These underdeveloped state run or controlled banking systems have not only restricted their citizens’ ability to borrow, they have also limited their investment opportunities, and used their citizens’ savings to invest in developed countries. Part of this is to control demand for consumer goods, and part of this is to

finance the banking system. During a class on investments with some mid-level Chinese executives in 2003, an argument broke out about compound interest. The students were surprised to hear that American banks paid compound interest while the Bank of China only paid simple interest. Of course when the Bank of China invested, they received compound interest, pocketing the difference. Once the argument was settled, the Chinese students asked about the details of starting an American bank account.

The near universal failure/weakness of state retirement systems and the generally uneven performance of many corporate retirement systems are not lost on Third World savers. Added to this is the relative uncertainty regarding the potential for governments' failing in the Third World leading many savers to move their life savings out of their own countries and into the First World (either legally or other-wise). Skinner (1987) showed empirically that a key factor in developing countries' household precautionary savings is income uncertainty.

The end result is that where banking systems do not provide market rate returns and lending during periods of low income, or sufficient safeguards on retirements, and external investment is not available (either de facto or de jure), individuals will save larger and larger portions of their income. It is also possible that savings rates are even higher than "official" bank or country data shows. Probably much of rural savings is buried in the back yard or hidden under the mattress.

## **Growth of Savings**

### *New Savers*

Du (2010) point out that a large percentage (nearly one half) of the current account balances of China is due to the rise of a new class of savers. Because of the large imbalance of men to women in Chinese society, due to the one child policy and the favoritism toward males, men are finding increasing competition for wedding partners. This has led to a major increase in male saving rates in order to attract a wife from the diminishing number of females. In some parts of China the ratio of males to females is as high as 1.6 to one.

### *Women*

In much of the developing world, a major source of investment is microfinance. Khandker (2000) has shown that not only has microfinance reduced the cost of borrowing, it has also increased saving among women, even in a poor country like Bangladesh. Vonderlack and Schreiner (2002) reported that the use of safe-deposit boxes, in addition to microfinance programs, allows women to maintain independent savings. Chamlee-Wright (2002) suggests that a robust entrepreneurial class is evolving in Southern Ghana, with women developing elaborate systems of accumulating capital, and planning for eventual exit and retirement.

Wilson and Purushothaman (2003) estimated that women could add over a \$100 billion to the Indian economy in the as little as five years. The female factor could make all Indians richer up to 25% by 2050.

Women in the past have had little or no control on savings due to cultural, social and legal rules. However, as microfinance and a movement away from male dominated jobs in all societies, women will represent a growing number of savers that could effectively almost double the number of savers in the world.

### *BRICs*

Brazil, Russia, India and China represent a mixed group in terms of savings. Brazil, India and China are continuing to grow while Russia is losing population. This growth of potential savers will dwarf any growth in the west. By 2025 Wilson and Purushothaman (2003) estimated that the BRIC's could add an additional 200 million people with incomes over \$15,000. India alone could add 240 million people (four times the total population of the UK) to its working age population. The question of course is whether these people will have jobs, but recent events in India point toward an attempt to reduce the infamous enterprise-killing bureaucracy.

For the near future (the next twenty years or so) the growth of China and extension of this growth beyond the coastal regions suggests a large increase in the number of people saving, which, when

combined with the high savings rate, will greatly increase the amount of capital available both in China and abroad. This will effectively keep interest rates down, as potentially the amount of savings could be well in excess of the amount of capital investment economies can absorb. And as the Japanese have shown, merely investing capital into infrastructure (bullet trains to ski resorts now carrying a handful of passengers a day) doesn't necessarily improve the economy, and in fact may prove a considerable drag on the economy, even without the usual accompanying corruption, waste and inappropriate investment common to government economic stimulus programs.

## CONCLUSION

The majority of savings in the world was historically the result of a small group of wealthy individuals in wealthier societies. In the near future large increases in working age people in the developing world, the increasing emergence of women as major entrepreneurs supported by microfinance banking availability, and savings by new groups (developing due to changes in cultural and societal norms and standards) could result in an imbalance between savings and investment needs. The relatively small savings of an enormous number of new savers could result in capital, like many commodities before, becoming as cheap as salt.

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