THE HOLY GRAIL OF MACROECONOMICS: LESSONS FROM JAPAN'S GREAT RECESSION, by Richard Koo. Singapore: John Wiley & Sons Ltd., 2009. ISBN: 978-0-470-82387-3; 320 pages.

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Unconventional crises that have been dealt with using conventional tools (already tested and proved ineffective) need perhaps to be treated with unconventional tools, either new or the old rusted ones left in the toolkit. This is the most important message one can get from reading this interesting *heretic* book (praised by Martin Wolf) which, despite its strong criticisms on the mainstream, has attracted a lot of attention worldwide.

The unconventional disease Koo analyzes is lackluster demand for credit by firms caused by the bursting of a major asset price bubble, which must be healed by the (now) unconventional tool of government spending financed by the public authorities borrowing the money firms are unwilling to take. This unconventional disease (falling demand for credit) started in the Western economies with the bursting of the dot-com bubble, and some doses of this rusted unconventional tool (fiscal stimulus) have been implemented, but it seems more needs to be done.

## Japan's Recession

The Japanese asset price bubble<sup>1</sup> burst in 1991. This major event left the balance sheets of nonfinancial companies underwater. Firms were thus forced to pay down debt, no matter how low interest rates were, and even at the expense of lower profits. The term Koo uses to describe this phenomenon is "balance-sheet recession". During this type of recessions both banks and firms are well aware of what is going on with their corresponding counterpart, but it is in the interest of both not to let the authorities or the (usually misinformed) media know because (1) banks may be asked to cut down credit lines (which will eventually lead to their going out of business) and (2) firms may get their credit ratings downgraded, which will prevent them from getting access to credit in the future. This is the unconventional disease the Japanese economy went through during the 1990s, and the unconventional remedy (which came several years later) was an expansionary fiscal policy financed by government borrowing.

This important fiscal stimulus through borrowing was highly efficient in bringing about the recovery and did not "crowd-out" private spending precisely because the lack of credit demand from the private sector was compensated by the demand for loans from the government. The Japanese recovery was rather modest but if the government had left all the responsibility in the hands of the Central Bank (as Monetarist-trained economists tend to recommend) to increase reserves, there would have been no recovery at all, or much worse. Economists trained under Ricardian-equivalence considerations never tire of warning about the dangers of selfishly inheriting the debt upon the future generations. Japan was no exception, and was frequently subject to warnings from international organizations (IMF and OECD, mainly) which put strong pressure on the Japanese authorities to pursue fiscal consolidation. The demand for credit and the whole economy deteriorated during the periods when the authorities ceded to these pressures. The heroes of the Japanese recovery, says Koo, were those policy-makers who supported and implemented, despite these pressures, deficit spending. Under this perspective it is much worse for future generations to inherit a depressed

<sup>1</sup> Koo explains that this bubble was a consequence of the overconfidence that ruled amongst Japanese firms during that period. The key to this success was producing good quality cheap products, *i.e.* cars and cameras, and

economy which bases its faith upon free markets than for them to inherit an indebted economy which bases its faith upon common sense! Of course, we heterodox economists know that the recovery will eventually lead the value of aggregate output to overly exceed that of debt, reducing the actual debt-GDP ratio.

# Yin and Yang economics

Koo warns that a strong fiscal stimulus should be pursued only when firms aim at repairing their balance sheets: the *yin* (or shadow) phase. During this phase monetary policy is powerless. Once firms have recovered from their debt-aversion and start borrowing again at a normal pace, which may take up to a decade or even more, the government must then seek fiscal consolidation. This is what Koo calls the *yang* (or light) phase, in which monetary policy regains its effectiveness and deficit-financed public spending may "crowd-out" private spending, therefore losing its effectiveness.

According to Koo, there is a strong parallel between Japan's Great Recession and the Great Depression of the 1930s. They were both a consequence of an unprecedented asset price bubble; both persisted due to the authorities' stubbornness to pursue fiscal consolidation; and both were solved by strong fiscal stimulus, which was implemented in the U.S. and in Germany at about the same time (beginning in 1933). Koo even theorizes that Hitler, who (in contrast to Roosevelt in 1937) never pursued fiscal consolidation, and thanks to his god-like status (earned by bringing prosperity to Germany), grew overconfident and attacked Poland, which unchained WWII.

Tracing the origins and explaining the events surrounding the Great Depression, according to Ben Bernanke, was equivalent to finding the Holy Grail of Macroeconomics. Without being pretentious, though immodestly, Koo believes to have found it... and he might have. Keynesian-inspired (not necessarily Keynes-inspired) policies were the panacea of the WWII aftermath, which fell out of grace with the advent (in the 1970s) of furious anti-Keynesians, of which Milton Friedman was the main and most influential representative, with Reagan and Thatcher (a decade later) as its main executors.

## Keynes and Keynesians

Koo says that Keynes' *General Theory* was describing an economy in *yin* (or depression) phase; therefore, fiscal policy was the right thing to do after the 1929 stock market crash. However, in a *yang* (or recovery) phase, Keynes' recommendations may not hold.

It seems to me that it would be rather bold to state that Keynes recommended fiscal expansion at all times and under all circumstances. Furthermore, not *all* Keynesians think this way either. Perhaps anticipating Koo's arguments Michal Kalecki, for example, stated that (under certain conditions, *i.e.* a slump) changes in deficit-financed government spending equal changes in firms' profits, the channel being effective demand. More recently, the *Stock-Flow* literature (see for instance Godley and Lavoie, 2007) is able to explain these imbalances *explicitly*. It must be noticed that this literature was first developed by James Tobin, who in his Nobel Lecture (Tobin, 1982) proposed *Stock-Flow* modeling as a tool to study the link between the real and financial sectors. Unfortunately, almost at the same time *Dynamic Stochastic General Equilibrium* models came in vogue and, with the help of strong anti-Keynesianism promoted by Monetarists, this important proposal has been largely ignored.

Stock-Flow models belong to the structural family. Despite the fact that this methodology is still on an experimental phase, it allows big-picture macroeconomists to describe an economy through a mix of behavioral equations and accounting identities. Therefore, as the balance sheet of firms and banks are explicitly taken into account, and as 'there are no black holes', these models are a powerful tool to analyze balance-sheet recessions.

Balance-Sheet Recessions and Stock-Flow Modeling

Richard Koo's book is easy to read. It has the advantage that it addresses a wide audience, which includes both economists and non-economists. Apart from explaining his own theory, he also provides an interesting discussion of why neoclassical Walras-inspired theory is seriously flawed. However, this almost-masterpiece of pedagogy lacks an explicit explanation of firms' balance sheets, which is the key to understanding balance-sheet recessions. This is explicitly done in the *Stock-Flow* literature.

Let us assume, for the sake of simplicity that firms' balance sheets are made up of only two assets and two liabilities. On the asset side we have physical capital ( $p_kK$ , where  $p_k$  is the price and K is the actual stock of physical capital) and financial assets ( $p_eE_f$ , where  $p_e$  is the price of equity and  $E_f$  is the number of titles held by firms). Assets must equal the sum of liabilities and net wealth (NW). Firms' liabilities are made up of loans (L) and equities issued ( $p_eE_f$ , where E is the number of titles issued by firms). This is summarized in the following balance sheet identity:

$$p_k K + p_e E_f = NW + L + p_e E$$

The corresponding flows of assets and liabilities may be expressed as:

$$p_k I + p_e \Delta E_f = UP + \Delta L + p_e \Delta E$$

Where I is investment (or  $\Delta K$ ) free of depreciation, UP are undistributed profits and  $\Delta$  is a difference operator. Time subscripts are dropped for simplicity.

Now, following the arguments set forth in Koo's book, during the yang phase (i.e. Japan between 1986 and 1991 or the U.S. between 1995 and 1999) the demand for new loans  $(\Delta L)$  is positive, and the holdings of new equities  $(p_e \Delta E_f)$  exceed the issuing of new equities  $(p_e \Delta E)$ . During this optimistic phase investment and profits increase significantly. In other words, the flow of assets  $(I + p_e \Delta E_f)$  exceed the flow of liabilities  $(\Delta L + p_e \Delta E)$ , which implies increasing profits. As Minsky (paraphrasing Keynes) put it, this overconfidence in financial markets, expressed in a growing price of equities  $p_e$ , brings with it the seeds of its own destruction. And as everything that goes up eventually comes back down, given the existence of gravity<sup>2</sup>, the price of equities falls drastically when the bubble burst. Once this happens we enter what Koo calls the vin phase (i.e. Japan after 1991 or the U.S. after 2000). In this phase the value of financial assets falls drastically and no mentally-sane investor would buy equity knowing that these are worthless. As a consequence, the value of equity holdings  $(p_e E_t)$  falls drastically and new equity issuing  $(\Delta E)$  is virtually zero. With this strong loss of financial wealth, investment falls and firms begin paying down debt ( $\Delta L < 0$ ) due to the fact that these are now unbearable. Firms will pay down debt even out of their profits before declaring themselves insolvent, which in turn further depresses investment. As mentioned above, it is in

<sup>&</sup>lt;sup>2</sup> In this case, for instance, *value in use* in the classical sense.

the interest of both banks and firms for the authorities and media not to know it; therefore this recession takes place silently. At the same time, at the macroeconomic level, investment falls short of savings in the private sector and, despite the current account being in surplus (as was the case in Japan during the 1990a), the government must step in and borrow the money firms are averse to<sup>3</sup>.

This last point is not addressed by Koo when he discusses, in chapter 4, "Monetary, Foreign Exchange, and Fiscal Policy during a Balance Sheet Recession." He focuses on exchange rate policy for both trade-surplus and trade-deficit economies, but says nothing about inter-sector imbalances, especially for the latter type of economies. Furthermore, he focuses mostly on developed economies and says almost nothing about peripheral regions (*i.e.* Latin America or Northern Africa), except China.

#### Conclusion

To summarize this review, this is a very interesting book that must be read attentively. Indeed, some amendments must be addressed in order to render it a full theory of how to prevent and/or prescribe balance-sheet recessions. Another main lesson from this book is that we (economists) must go back to the basics and include solid accounting frameworks in our models, instead of assuming all markets magically adjust. Big picture macroeconomists (as Koo calls them) have the advantage of understanding what happens within *and* between economic sectors. Tobin-Godley *Stock-Flow* modeling could be a good lead in this direction.

# References

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<sup>&</sup>lt;sup>3</sup> This may be seen in the well known identity (private savings – private investment) = government deficit + net exports.