

Artículos

HOW TO CREATE A BANKING & MONETARY SYSTEM FOR THE 21ST CENTURY: THE HUERTA DE SOTO AND CHICAGO PLANS REWORKED

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Resumen: En este artículo se analizan y evalúan de forma comparativa los dos proyectos más importantes de reforma bancaria que se han elaborado en los últimos años en la línea de volver a requerir un coeficiente de caja del 100 por cien para los depósitos a la vista (y equivalentes), de los bancos privados: el expuesto por el profesor Huerta de Soto en su libro *Dinero, crédito bancario y ciclos económicos* publicado por primera vez en 1998, y la actualización del plan de Irving Fisher, propuesta más recientemente por los economistas Michael Kumhof y Jaromir Benes del Fondo Monetario Internacional.

Palabras clave: Huerta de Soto, Kumhof/Benes, Plan de Chicago, Reserva fraccionaria, Fondos de inversión, Quantitative Easing.

Clasificación JEL: B31, B53, E42, E52.

Abstract: Every economics textbook will tell you that banking is at its core a process of intermediation designed to facilitate the transfer of savings into investment. In some respects fractional reserve banking does this much too well. It is a system which takes deposits and lends them out. The problem is that this process is built on – for want of a better word – deceit. Borrowers are offered secure term contracts, while depositors are promised their money back whenever they want it. This deceit only works because most depositors are happy to keep their money in the banking system most of the time. Supporters of fractional reserve banking would say – so what. The fact that the system exploits this trait of depositors – to keep their money in banks

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rather than under their mattresses – is surely a good thing. Without such a system, lending would not happen to anywhere near the same degree, credit creation would be severely impeded and economic activity adversely affected. The problem with this system is that it has a tendency to max out on credit creation in the good times, but chronically undersupply credit in the bad times – thus greatly accentuating the natural ups and downs of the business cycle. And over a course of time, it results in an accumulation of debt in society that is not economically very healthy. Recent events underline these concerns. Any proposed reform of the banking and monetary system needs to be able to illustrate that such a system will be capable of delivering the «right amount» of credit in good times and bad – so as not to impede economic activity in downturns, but also not to act as an accelerator for the good times. We can refer to this as the «optimal» quantity of credit over the course of the business cycle. In this paper, I assess two models. One is a derivative of the so-called «Chicago Plan», and set out in the IMF Working Paper by Michael Kumhof and Jaromir Benes titled *The Chicago Plan Revisited* published in August 2012. The other is an equity-based proposal which I call the «Huerta de Soto Plan», and derived from proposals set out by Professor Jesus Huerta de Soto in his book *Money, Bank Credit and Economic Cycles*, published as far back as 1998. The Kumhof/Benes proposal puts monetary policy at the heart of the credit creation process in a way that is far more effective than under the current system. Governments end up achieving far greater control of the levers of monetary power than under today's fractional reserve system. By contrast, the Huerta de Soto Plan opts for a free-market based approach to money resulting in a free and genuinely open market for credit that is driven entirely by the forces of competition and where governments and central banks have no role to play in monetary policy. This paper spells out the mechanics underlying both plans, and assesses their relative merits. Neither plan is perfect. Both propose extremely radical reform of the modern monetary system, and they can result in – I believe – some potentially very inflationary and damaging behavioral effects in the process of the transition from the present system to what is proposed. The Kumhof/Benes proposal is far and away the weaker of the two – not only would it be economically and politically unworkable – the behavioral consequences would be harder to control. By contrast, the Huerta de Soto Plan – although more radical in many respects – would also be more palatable, albeit it would need certain tweaks, and the adverse behavioral impacts arising from the implementation of this plan would be somewhat easier to offset.

Key words: Huerta de Soto, Kumhof/Benes, Chicago Plan, Fractional Reserve, Mutuals, Quantitative Easing.

JEL Classification: B31, B53, E42, E52.

I INTRODUCTION

This paper originates from a public series lecture which I attended three and a half years ago organized by the London School of Economics.

Thanks to the LSE's pulling power, these lectures host great intellects and inspired thinking, as well as (let's be honest) the occasional duds.

On this occasion the speaker was Professor Jesus Huerta de Soto of the King Juan Carlos University in Madrid, and he fell very clearly into the former category. I cannot remember the exact title, but the subject matter covered the evils of fractional reserve banking and a proposal from the Austrian School of economic thought to mend our monetary and banking systems.

A bit of a snooze-fest you might think, and I had gone along more out of curiosity than any sense of expectation. But Prof. Huerta de Soto gave a stellar performance and his talk was riveting. Afterwards I bought his book – *Money, Bank Credit and Economic Cycles* – on which the lecture was largely based. I have to say it was the best £30 I have ever spent on a textbook in my life.

(His proposal was first published in 1998 in the original Spanish edition of his book, pp. 611-623, *Dinero, crédito bancario y ciclos económicos*, Unión Editorial, Madrid 1998. There have also been three English editions by the Ludwig von Mises Institute 2006, 2009 and 2012, of which I bought the 2009 edition – so page references given later in this article relate to that edition. His book has also been translated and/or published into 20 other languages.)

For the next two months I picked my way through it, and deeply regretted that it had not been available when I was doing my undergraduate and postgraduate studies in economics 20/30 years ago. The ideas seemed revolutionary and the analysis filled many of the shortcomings of mainstream macroeconomics.

At its core it explained how one could not even begin to tackle the major macroeconomic problems of the modern world without first tackling our banking system which itself is integral to the workings of every modern monetary and economic system

in existence today. And the central problem at the heart of this banking system lies in the exercise of fractional reserve banking.

And then – I forgot all about it. Life got in the way – there were holidays to plan, trips to go on, work to do.

But late last year I happened to attend another lecture at the LSE – Professor Brendan Simms: Europe, the Struggle for Supremacy. While I was sitting there trying to get my head around Prof. Simms central thesis – that the European Union will fall apart because of what happened to the Holy Roman Empire five centuries ago – I just happened to be leafing through the LSE's lecture schedule to discover a parallel lecture taking place in a rival theatre at the very same time.

The title of that lecture was *The Chicago Plan Revisited* and the speaker was Michael Kumhof of the IMF. Next day I was able to listen to a podcast of this lecture and then downloaded from the web the research paper of the same name co-written by Mr Kumhof and a colleague, Jaromir Benes.

Their paper dealt essentially with the same issue as Prof. Huerta de Soto's lecture and book – the evils of fractional reserve banking and how to solve the problem. Much of the maths in this paper went over my head, but the framework set out was clear cut, and their analysis brilliant.

Their proposed solution, however, was unworkable – dare I say barking mad. It's the sort of solution that might have been dreamt up by the lovechild of Joseph Stalin and Robin Hood.

But it got me thinking. I revisited the ideas from the Huerta de Soto book and the solutions proposed there (from page 788 onwards). What I have done in this paper is to take the conceptual solutions put forward by Prof. Huerta de Soto and applied them in the Kumhof/Benes framework, adding a few observations of my own.

I have laid out this paper as follows:

1. What is fractional reserve banking and why is it so wrong?
2. An outline of the Kumhof/Benes framework for dealing with the problem.
3. An assessment of the flaws in the proposed Kumhof/Benes solution.

4. An outline of the Huerta de Soto solution within the Kumhof/Benes framework.
5. An assessment of the economic risks arising from both plans and whether these plans can cope with these risks.
6. Some critical observations on the practicality of the Huerta de Soto plan and my proposal for a workable version of that plan.
7. Finally, an appraisal of the welfare implications of banking reform – does it provide an «optimal» supply of credit?

I have also included an annex which extends the Kumhof/Benes framework to incorporate central banks and quantitative easing.

I am very grateful to Prof. Nick Barr of the LSE for allowing me to road-test these ideas on him.

II WHAT IS FRACTIONAL RESERVE BANKING AND WHY IS IT SO WRONG?

What I have to say on this topic is no substitute for the brilliant analysis and critique laid out in the source material – read the Huerta de Soto book or, if you have less time, the Introduction and Section 2 of the Kumhof/Benes paper.

For readers who want a more immediate flavor, the following example may suffice.

I am penniless so I go to my friend – let's call him Friend A – and I ask him to lend me £10. Having secured this £10, I then go to Friends B, C, D, E, F, G, H, I and J and persuade them each that I can lend them £10 each. Having written out the loan contracts, but not actually having given them any money yet, I then walk around town telling everyone I have £100 in assets to my name (the £10 in cash from A plus the 9 x £10 of loans made to friends B ...J). I don't mention that my liabilities are also £100 (the £10 owed to A, plus the £90 I would need to fork out to my other friends when they eventually come knocking on my door asking for the loans I have promised them). And I certainly don't

mention that, if even just two friends decided to exercise their claim against me, I would be bust.

No business or individual could possibly operate in such a crazy half-baked manner – right? It would be tantamount to fraud – wouldn't it? Wrong. This is exactly the way in which our modern banking system works. And it is a system known as fractional reserve banking.

What is really going on here is that – if I was (let us say) the only bank in town – in taking that initial deposit of £10 from A, I lend the £10 of cash to B, which I have obtained from A. B does not need to spend the £10 immediately, so he deposits it back with me.

I now have £20 in assets – of which £10 is cash from B, plus the £10 loan to B. I also have £20 in liabilities – the original borrowing from A of £10, plus the deposit from B of £10.

I then go and lend C £10. He too does not need the £10 immediately, so he deposits it back with me, and my assets and liabilities go up to £30. And so this process continues. Okay, I have not gone out and created a £100 of assets immediately out of that first £10 borrowed from A – the process has taken a bit of time to happen, and it has depended on first B, then C, then D etc depositing the money back with me each time. But the end result has turned out to be exactly the same – and if any two of these clients actually asked for their money back, I would be bust.

(It's also worth noting that regulators will not allow banks to lend out 100% of their deposits, so they might need to keep – say – 10% as reserves, but that is still £9 out of 10 being loaned out every time.)

Of course one bank operating amongst many could not expect this money to be deposited back to itself all the time but, unless people develop an overnight propensity to stuff their cash under their mattresses, most of that money will find its way back into the banking system somewhere. And so this process can and does work across the banking system as a whole. Correspondingly, it is no coincidence that, when people do decide to keep their money out of the banking system, bank runs start to happen and the entire system teeters on the brink.

Whereas I as an individual could never hope to get away with operating in such a manner, the banking system does it every day. In essence, the modern banking system survives on the back of a giant confidence trick – the expectation that most people will keep their money in the system almost all the time. But when confidence starts to ebb, things can go horribly wrong with far-reaching consequences that are all too self-evident today.

It is obviously a flawed system and no other industry or individual would be allowed to get away with it, but the banking sector enjoys a unique privilege in this regard for historical reasons. The consequence is an explosion of credit in boom times and a vicious contraction in downturns – in effect the fractional reserve system greatly accentuates the ups and downs of the business cycle.

The Kumhof/Benes paper and, especially, the Huerta de Soto book provide a full historic perspective and critique backed by a plethora of evidence on this subject. The most recent banking crisis is merely one of many that have happened over the course of history directly as a consequence of this flawed system.

Surprisingly perhaps, mainstreams economics barely covers the topic at all. It takes for granted the existence of fractional reserve banking, and never even stops to question the rationale or merits of this system. Students reading Economics 101 might be taught in passing about the mechanics of fractional reserve banking, the money multiplier etc before being moved swiftly to other topics, and then forget all about it. Indeed Mr Kumhof noted in his lecture, that, in his literature review of the field, he was startled by how little there was in the post-war period on this subject. (The bibliography of the Kumhof/Benes paper is absolutely dominated by literature from the 1930s and prior decades – even prior centuries.)

But the starting point of this paper is that fractional reserve banking is wrong and the banking system needs to transition to a world where deposits are 100% reserve backed, ie if everyone of friends A ... J exercised their claims against me (even at the same time) they would be guaranteed to get their money back.

III THE KUMHOF/BENES FRAMEWORK - A SUMMARY OF THE CHICAGO PLAN REVISITED

The starting point for Kumhof/Benes is a simplified representation of the system as it is today.

The two boxes below show the banking system and government's respective (& highly simplified) balance sheets. For those not overly familiar with basic accounting, the left side of each box represents assets and the right side constitutes the liabilities and equity. The left and right sides must match, ie total assets of the banks of 200 must equal the sum of the liabilities and equity of 200.

FIGURE 1

Banking System			
GOVT BONDS	20	DEPOSITS	184
ST & MORTGAGE LOANS	100		
INVESTMENT LOANS	80		
		EQUITY	16
	200		200
Government			
OTHER NET ASSETS	80	GOVT BONDS	80

I use the same numbers as presented on page 64 of the Kumhof/Benes paper, and these numbers represent percentages of (US) GDP. There are a couple of things to note.

First Kumhof/Benes make a distinction between the type of loan made (eg mortgage loans versus «investment» loans). This will matter later.

Second, note that – against deposits of 184 – the banks have very little by way of liquid assets. In other words, if depositors

wanted to take their cash out of the banking system en masse, it would simply not be possible.

1. Stage 1 of the Transition Process

In order to start a transition away from fractional reserve banking, the government creates reserves equivalent to the deposits in the banking system of 184. Think of this as just cash which the government has printed, and gives to the banking system.

Those reserves are now assets of the banks. In return the banks now owe this amount to the government – it is a sort of deposit that the government has put in to the banks. Kumhof/Benes refer to this as «Treasury Credit» which implies that it is a liability. However, it could just easily be an equity stake in the banks held by the government.

FIGURE 2

Banking System			
RESERVES	184	DEPOSITS	184
ST & MORTGAGE LOANS	100	TREASURY CREDIT	184
INVESTMENT LOANS	80		
GOVT BONDS	20		
		EQUITY	16
384		384	
Government			
OTHER NET ASSETS	80	GOVT BONDS	80
TREASURY CREDIT	184	Newly Created Equity: RESERVES ISSUED TO BANKS	184
264		264	

On the government’s balance sheet, this Treasury Credit (or equity in the banks – however you prefer to think about it) is now

an asset and the «cash» (reserves) that have been created may be considered either a liability or an equity position – depending on the accounting treatment of cash – on the right side of that balance sheet . Kumhof/Benes treat it as equity.

The general and historic presumption is that cash is the liability of the central bank (or, in this example, the government), but there is a strong line of thought that, in the world of fiat money, it might as well be treated as government equity – and Kumhof/Benes make this case very well in their paper.

2. Stage 2: Cancellation of Govt Bonds held by Banks

The 20 units of govt bonds held by the banks can now be offset/ cancelled out against the Treasury Credit. As a consequence, Treasury Credit falls to 164, and note that on the government's balance sheet, the government's stock of bond debt also falls by 20. (Govt bonds are obviously held by other economic players – not just the banks.)

FIGURE 3

Banking System

RESERVES	184	DEPOSITS	184
ST & MORTGAGE LOANS	100	TREASURY CREDIT	164
INVESTMENT LOANS	80	EQUITY	16
	364		364

Government

OTHER NET ASSETS	80	GOVT BONDS	60
TREASURY CREDIT	164	Newly Created Equity: RESERVES ISSUED TO BANKS	184
	244		244

3. Stage 3: The Final Transition

We now get to the nub of the Kumhof/Benes proposal.

The government now cancels out all outstanding mortgage and «short term» loans against Treasury Credit, which falls by 100. As a consequence, on the government's balance sheet its assets will also fall by 100. Correspondingly, on the right side of the balance sheet, its equity position will fall by 100.

FIGURE 4

Banking System

RESERVES	184	DEPOSITS	184
INVESTMENT LOANS	80	TREASURY CREDIT	64
		EQUITY	16
	264		264

Government

OTHER NET ASSETS	80	GOVT BONDS	60
TREASURY CREDIT	64	Newly Created Equity: RESERVES ISSUED TO BANKS	84
	144		144

On the banks' balance sheet, deposits are now fully reserve backed. Loans are backed by a combination of govt debt/equity (Treasury Credit) and private equity. Kumhof/Benes do not discuss the seniority of the capital structure, but one presumes that – in the event of loan losses – private equity will take the first hit. In extreme crises, Treasury Credit will be much more malleable to adjustment than private liabilities, so you no longer get the multiplier effect of banks being forced to withdraw credit (the dreaded «credit crunch») that occurs under fractional reserve banking.

Indeed, under the Chicago Plan, if governments believe there to be a shortfall of credit, they can just open up the spigot and

flood banks with more Treasury credit to pass on as loans. Indeed, they could even impose a negative interest rate (pay banks for taking Treasury Credit to be passed out as loans). And with this, Keynes' famed Liquidity Trap is consigned to history.

Three key things have happened here:

1. Banks now hold reserves exactly equivalent to the volume of deposits. If all depositors wanted to withdraw their money, they could now do so.
2. All mortgage and short term loans have been cancelled, and by extension the banking system will be constrained to only making «investment» loans going forward – ie kiss goodbye to your credit card, auto loan, mortgage etc – these will be curiosities from the past.
3. Anyone who held a mortgage, credit card debt or auto loan has just had it paid off for them by the government.

(In the Kumhof/Benes paper, there is a final rejigging of balance sheets whereby some of the banks' capital is transferred to Treasury Credits in order to impose optimal capital holdings on banks, ie under capital adequacy rules, banks have ended up carrying too much capital after stage 3 which is no longer necessary.)

IV

FLAWS IN THE KUMHOF/BENES SOLUTION

In order to achieve a good result – the death of fractional reserve banking – the government has had to do a couple of absurd things.

First, some bureaucrat somewhere is going to be dictating what sort of loan a bank can or cannot make – the Stalinist element of the plan.

Second, a whole bunch of debtors have just been ludicrously enriched – the Robin Hood element of the plan.

As economic justification for the first, Kumhof/Benes cite the case of pre (1st) World War Germany, whose economic system was renowned (and some might say still is) for the triage between heavy industry, the banks and government, with an unerring focus

on promoting the former – back then largely for military purposes. Consumer credit never got a look in.

You will forgive me for thinking that this anti-diluvian model is hardly the best starting point for redesigning a banking system to meet the needs of economic systems in the 21st century – which are now also predominantly service-based, even today's Germany.

In the Kumhof/Benes world only «industrial» loans are – in their words – «socially useful credit». So, no more mortgage loans, credit card loans, auto loans, overdrafts. This is daft. And – even assuming there is some merit to this thought-process – where do you draw the line? For example, how do you treat the entrepreneur who mortgages his house to fund his business – is that a business loan or a mortgage loan? Does property development constitute a socially useful credit and qualify under this system? And what happens to the housing market, now that mortgages are no longer allowed, so the only feasible buyers will be cash buyers? And how are these decisions made – presumably some govt bureaucrat handing down loan approvals to banks from on high.

Even if there could be some economic justification for this system – and, in an otherwise brilliant paper, Kumhof/Benes have not come remotely close to making even a partially viable case – no politician in the mainstream would ever back such a plan.

As for the second – the Robin Hood element – where is there any sense of individual culpability? It is all too easy to think of banks as the villains of the piece – much too ready to hand out credit in the good times, pull it back in the bad times – facilitated by the fractional reserve mechanism which makes it all possible.

But, what about those borrowers who took out the 100% second mortgages or maxed out on a dozen credits cards in the local shopping mall. Who put a gun to their heads forcing them to do that?

And this is the very cohort in society that is going to be rewarded with a massive wealth transfer in the Kumhof/Benes world by way of thanks for indulging in their debt binge in the first place.

Never mind the economic case for such a transfer – it is just plain and simply wrong. It rewards bad behavior and creates the worst type of moral hazard.

Added to which, how could such a plan be sensibly implemented? Assuming the govt legislation would take 6-18 months to be carried through Congress/Parliament, every individual who heard of this idea would rush out to take out as many mortgages, credit cards, auto loans and other borrowing in the expectation that it would be written off imminently. What would the government do – impose an outright freeze on new credit creation on the banking system while the legislation was going through?

These two flaws mean that economically and politically the Kumhof/Benes proposal is both bad and unworkable. It would be stone-dead and – with it – any hope of reforming the banking system.

V

THE «HUERTA DE SOTO» SOLUTION

The solution proposed by Prof. Huerta de Soto is laid out on pages 788-803 of his book.

Unlike Kumhof/Benes, he looks at this problem from a global perspective. He recommends that central banks be made independent (where they are not already). These central banks should then act in uniformity to stabilize money supply growth on a pre-determined rule linked to the rate of productivity growth. As a result credit expansion becomes more moderate, and the global economy is able to move towards a system of sustainable fixed exchange rates.

All this may take years to happen, but once it is achieved, and expectations are embedded in the system, the real reform can begin, and that reform must happen across all countries.

The starting point of the reform process is the same as with Kumhof/Benes – with identical balance sheets for banks and government (Figure 5).

The one important difference is that no attempt is made to distinguish between the type of loans which banks have on their balance sheet.

FIGURE 5

Banking System			
GOVT BONDS	20	DEPOSITS	184
LOANS	180		
		EQUITY	16
	200		200
Government			
OTHER NET ASSETS	80	GOVT BONDS	80

1. Stage 1: The creation of mutuals

In the first stage, so-called «mutual» or investment funds are created. These could be independently set up or hived off from the lending departments of banks.

Depositors in banks are then invited to swap their deposits for shares in the mutuals. Let us assume that, of the 184 in deposits, 14 are swapped into shares, which are transferred to the mutuals. Correspondingly, 14 of the bank's loans are also transferred across to the mutuals. The respective balance sheets are shown below (Figure 6).

The important point to note here is that the loans held by the mutuals are now fully equity-backed. In other words, as with any mutual fund or unit trust, the rise and fall in the value of the assets is fully matched by corresponding changes in the value of the equity base. If the mutuals happen to have made a whole bunch of dud loans, whose value falls to zero, then the equity investors will have been wiped out. This is a critical difference from the situation of bank loans where the liability (deposits) remains fixed in value regardless of changes in the asset value.

FIGURE 6

Banking System

GOVT BONDS	20	DEPOSITS	170
LOANS	166	EQUITY	16
186		186	

Mutuals

LOANS	14	SHARES IN FUNDS	14
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Government

OTHER NET ASSETS	80	GOVT BONDS	80
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2. Stage 2: The move to full reserve backing

As before, we follow the Kumhof/Benes transition. 170 Treasury Credits are issued to serve as reserves against the 170 remaining deposits. The government balance sheet changes as before, but the mutual balance sheet remains unchanged (Figure 7).

3. Stage 3: Write-off of Govt Bonds held by Banks

As before 20 units of govt debt is written off against Treasury Credit. Again the mutuals' balance sheet remains unchanged (Figure 8).

4. Stage 4: The transition of lending to Mutuals

Now comes the crucial step. Loans are transferred from the banks to the mutuals along with a corresponding transfer of Treasury Credit (Figure 9).

FIGURE 7

Banking System

RESERVES	170	DEPOSITS	170
LOANS	166	TREASURY CREDIT	170
GOVT BONDS	20	EQUITY	16
356		356	

Mutuals

LOANS	14	SHARES IN FUNDS	14
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Government

OTHER NET ASSETS	80	GOVT BONDS	80
TREASURY CREDIT	170	Newly Created Equity: RESERVES ISSUED TO BANKS	170
250		250	

Note that banks retain some loans – 16 units – so they are not out of the lending business entirely. But their loans are fully equity-backed, following the same rules as the mutuals, ie any change in the value of the loan has to correspond one-one with changes in the value of the equity.

However, the bulk of the banks' balance sheet consists of deposits which are 100% reserve backed. Banks are not permitted to use their deposits to make loans, and if banks do make loans against their equity, the deposits have to be strictly ringfenced in law in case losses incurred by banks happen to exceed their equity base – although it is difficult to envisage such a situation arising under this new arrangement, (ie losses being greater than 100% of the value of loan assets).

FIGURE 8

Banking System

RESERVES	170	DEPOSITS	170
LOANS	166	TREASURY CREDIT	150
		EQUITY	16
	336		336

Mutuals

LOANS	14	SHARES IN FUNDS	14
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Government

OTHER NET ASSETS	80	GOVT BONDS	60
TREASURY CREDIT	150	Newly Created Equity: RESERVES ISSUED TO BANKS	170
	230		230

The mutuals' balance sheet has also been transformed. Mutuals have now taken on the bulk of loans from banks. Their private equity base remains the same as before, ie 14, but now they have also acquired 150 Treasury Credits.

There is, moreover, no attempt to dictate to mutuals what loans they should or should not make.

In the analysis above, I have separated out stages 1-4 in order to facilitate exposition. Under the Huerta de Soto plan everything that happens from stages 1 through 4 would happen simultaneously.

FIGURE 9

Banking System			
RESERVES	170	DEPOSITS	170
LOANS	16	EQUITY	16
186		186	
Mutuals			
LOANS	164	TREASURY CREDIT	150
<i>o/w</i>			
<i>transferred from Banks</i>	150		
<i>Original Loans</i>	14	SHARES IN FUNDS	14
Government			
OTHER NET ASSETS	80	GOVT BONDS	60
TREASURY CREDIT	150	Newly Created Equity: RESERVES ISSUED TO BANKS	170
230		230	

5. Stage 5: Privatisation of the Mutuals

The govt then invites non-bank private holders of govt bonds to swap their holdings in exchange for shares in the mutuals. Assuming this offer is voluntarily taken up, the 60 remaining govt bonds are eliminated, and in return Treasury Credits are reduced from 150 to 90, while 60 new private shares are created in the mutuals (Figure 10).

Note that, even if the government offer was not voluntarily taken up, the govt could simply offer up for public sale 60 units of Treasury Credit, and with the cash raised just buy back outstanding govt debt – or stop issuing new debt and let existing debt amortise over time.

FIGURE 10

Banking System

RESERVES	170	DEPOSITS	170
LOANS	16	EQUITY	16
186		186	

Mutuals

LOANS	164	TREASURY CREDIT (aka Govt Equity)	90
		NEW PRIVATE SHARES IN FUNDS	60
		ORIGINAL SHARES	14
164		164	

Government

OTHER NET ASSETS	80	Newly Created Equity: RESERVES ISSUED TO BANKS	170
TREASURY CREDIT	90		
170		170	

6. Stage 6: Full Privatisation and a return to the Gold Standard

Even after stage 5, there are still 90 Treasury Credits left in the mutuals and Prof. Huerta de Soto recommends that the govt goes all the way to full privatization. The assets that are generated can be used to offset future (pensions) liabilities. One can imagine – especially if this plan was implemented unilaterally by a country – the govt setting up some sort of sovereign wealth fund with huge investments in foreign and domestic assets.

Prof. Huerta de Soto finally recommends that central banks be entirely abolished, and with it the ability of CBs/govt to print new money at will.

Prof. Huerta de Soto expects that over time today's money will be replaced by new forms of private money, and that it is impossible to predict what form that will take. But he strongly recommends that immediately after abolishing the central banks, there is a return to a Gold Standard. In effect, all private money outstanding is linked to gold at a then-to-be-determined rate. Keep in mind that the Huerta de Soto solution is pitched in a global context where these reforms have been enacted internationally and exchange rates have been effectively fixed.

He believes that there will be an initial inflationary shock as the price of gold shoots up, but this will be a one-off before stability is restored.

Then over time, full freedom in banking would imply that new monetary standards may well emerge, and he is not doctrinal about sticking with the gold standard. As he puts it,

it is impossible to predict whether gold would continue to be the currency chosen by the market as a medium of exchange, or whether future changes in social conditions would spontaneously, through a process of evolution, give rise to the emergence of an alternative standard (p. 802).

To his credit, this is not nearly as fanciful as it might have appeared when he first wrote it in the late 90s – just think bitcoins!

But what he doesn't explain is the mechanics of the process and who will operate and regulate the system – the government, private institutions, some form of endowment trust? There is a lot to be fleshed out here.

VI

THE TWO SOLUTIONS - MERITS & FLAWS AND HOW THEY COPE WITH CERTAIN ECONOMIC RISKS

The great merit of the Huerta de Soto proposal is that it gets around the two big flaws in the Kumhof/Benes proposal discussed

previously. There is no attempt by government to dictate what kind of loans the mutuals should be making. And there is no debt write-off for specific cohorts of society.

However, both models give rise to a number of concerns which I will discuss below.

1. The Creation of «near Monies» in the Mutual Funds Model

The Huerta de Soto plan is perhaps not quite as original an idea as it first appears. Indeed, in their paper, Kumhof/Benes refer to two competing models of the Chicago Plan originally proposed by Henry Simons (p 18).

The model adopted by Kumhof/Benes is one of those. The other intriguingly was a proposal to replace banks with investment trusts. These would issue both debt and equity to finance lending, hence quite similar to the mutual funds in the Huerta de Soto plan.

But this was apparently rejected by Simons, and certainly by Kumhof/Benes in favour of full government funding of credit partly because they believe(d) investments trusts issuing loans to fund investments would create «near monies». Although the objection is put on the basis that Government would lose control of the credit creation process, the real objection is that you risk recreating a quasi-fractional reserve system.

Consider for example that Fund A has £10 in equity funding. It lends this to Company A which – instead of going out and building a factory – decides to lend to Fund B. Fund B then lends out £10 to company B, which lends to Fund C etc. As a consequence, you have recreated a credit spiral a la fractional reserve banking. There are, however, a couple of differences.

First, it should be clear that these loans would not be risk-free, ie unlike the depositor in the bank who expects his money to be secure and backed by the government, these are potentially high risk loans where the lender should expect to face a default in an adverse scenario (albeit he will be higher in seniority to equity investors in the trusts).

Second, the loans would be for specific time periods, eg company B might buy a 5 year fixed term security of Fund B. It then gives up the right to demand a repayment for the next 5 years. So, as long as Fund B is able to get the money back within the 5 years, there is no risk of a default being triggered in the interim as a result of company B walking in the door and demanding its money back before the 5 years are up.

A more significant problem though is that this sort of chain structure creates systemic risk, whereby if there is one loan default, this then triggers a whole sequence of defaults with potentially serious consequences beyond the immediate defaulting investment trust.

I think the first point to make in response is that the Huerta de Soto plan is different to the original Simons concept of the investment trust. Under the Huerta de Soto proposal laid out in the previous section, it is clear that mutuals initially have access to only two sources of funding – government money, ie Treasury Credit, and pure equity. These are the same sources of funding provided to the banks in the Kumhof/Benes framework.

This, I think, satisfies one of the Kumhof/Benes objections to the equity model.

Further I agree that it would be undesirable to create a situation where funds are able to leverage their balance sheets at all. Nor should funds be allowed to become interdependent. Therefore, two rules should be instituted.

First, once stage 6 in the Huerta de Soto proposal is reached and the final bit of government funding has been eliminated, mutuals should not be allowed to borrow again. They must be funded entirely out of equity. Owners must carry all the risk, which will incentivize them to ensure that the fund is being prudently run. More importantly, this will also mean that – unless the value of all assets in the fund is wiped out – a mutual will not be able to default, ie the value of shareholder funds will move in sync with the asset base.

(In the case of a leveraged balance sheet, the decline in asset values beyond a threshold level would trigger outright default, and this could set off the chain reaction of defaults considered above.)

Second, mutuals should not be allowed to buy shares in one other. Of course, if mutual A lends to company A which happens to buy shares in Mutual B, then there is indirect exposure. But unless this is a deliberate strategy pursued on a fairly major scale – and it is unclear why that should be – then the combination of these two rules should eliminate any systemic risks.

Furthermore, I strongly believe that the mutuals markets should be highly heterogeneous – ie there ought to be hundreds, even thousands, of mutuals. Not only will this encourage competition (see below), it should also reduce systemic risk, and eliminate the «too-big-to-fail» syndrome within the industry that is all too prevalent in the banking sector.

2. The Inflation Problem

There is one thing that really troubles me about both the Huerta de Soto and Kumhof/Benes proposals.

You are taking balance sheets worth X and inflating their size by some considerable margin.

In the Kumhof/Benes case, you start with a bank balance sheet worth 200% of GDP which goes up to 264% of GDP by the end of the transition. In addition the wealth transfer to the debtors means their net assets have been increased by 100%. And government balance sheets have increased from 80 to 144%. In the Huerta de Soto plan, there are similar magnitudes of increases in balance sheets.

So there has been a dramatic increase in monetary aggregates with no corresponding increase in the stock of physical assets.

Kumhof/Benes flatly deny this will have any significant inflationary consequences. Prof. Huerta de Soto also does not expect significant inflationary consequences – except in the final stage ironically when there is a return to the Gold Standard.

It is difficult to imagine that little will change in this new world. Although the increase in the balance sheet of the financial sector may not be inflationary – if people keep their money in the banks – there are, nevertheless, likely to be significant behavioural consequences flowing from changes in balance

sheets of some of the other sectors – which I don't believe the models can even begin to capture. Just imagine:

1. As a previously impoverished and indebted individual who has been massively enriched overnight (under the Kumhof/Benes plan), I no longer have to worry about paying interest or amortising my mortgage, or paying down those credit card debts. My income is now freed up – I am bound to increase my spending. (This is a classic case of self-selection where the very people being enriched are those who have already demonstrated a high propensity to spend!)
2. As a politician whose government has just had a significant portion of its debts cancelled, I can now deliver on all those spending/tax cutting promises made to my constituents.
3. As a banker who is now largely funded by the government on low cost credit, I can go out and make all the loans in the world, knowing that losses will not matter because no depositor will ever be hurt by them and the government can prop me up with an endless supply of credit.
4. As a businessman, I can go out and undertake all kinds of investment projects because my banker has transformed himself overnight from Mr Scrooge to Dr Pangloss and will lend me anything I ask. He might also very kindly pass through some of the reduction in his cost of capital (thanks to his access to cheap government money), which in turn reduces my hurdle rate for investment projects and makes so many more of them so much more feasible to my shareholders.

The vulnerabilities of the Kumhof/Benes plan to these sorts of abuses are simply huge. I discuss them in more detail below.

a) Inflation Risk from Cheap Credit

There is no longer any discipline on banks in the lending function. Incredibly, Kumhof/Benes actually highlight as one of the strengths of their model the fact that industry gets to benefit from the low cost of government funding – assuming banks are willing

to pass this on. One of their objections to the equity model (proposed by Simons & by extension the Huerta de Soto proposal) is that investment trusts – being private sector organizations – will face higher costs of funding, so the interest rates to businesses will be higher and this will adversely impact economic activity.

The Huerta de Soto plan, by contrast, imposes strong market disciplines on the mutuals – they are entirely beholden to their shareholders for their performance. There is no bailout from the government for bad decisions. Risk should be priced efficiently as a consequence. The cost of capital is determined by the market, and not by government fiat, so capital will be efficiently allocated.

I would go further and argue that, unlike the current oligopoly which exists in banking, there is no reason why there should not be hundreds – if not thousands – of mutuals created in order to enhance the forces of free market competition, both in lending and in accessing equity funding from shareholders – with a full range of returns on offer based on the riskiness of the underlying investments. Mutuals can specialize in lending to individual sectors and in the type of loans or equity investments they make – wherever they think their particular brand of expertise gives them a niche.

Efficient market pricing of risk should help to curb excess lending arising from the mispricing of credit – particularly in the boom phase of the business cycle.

b) Inflation Risk from the Credit Creation Process

Under the Kumhof/Benes proposal, governments acquire tremendous power over the credit creation process. Indeed the attraction of the Chicago Plan to its proponents (both latter day and historic) is the very ability to impose direct control over the credit creation mechanism – a control that fractional reserve banking greatly diffuses because banks themselves are in charge of the credit creation process.

Governments have effectively been given a blank chequebook to influence the credit mechanism directly and not only can they influence the quantity of credit, but they also are able to impose

a Stalinist diktat on exactly the sort of credit that can be dished out.

How governments chose to exercise that control will be determined by politicians playing an electoral cycle. It doesn't exactly fill one with confidence.

At least under the Huerta de Soto plan, there should be some mitigating factors. He proposes a global solution where central banks around the world build up their credibility through strict rules-based issuance of credit for several years before actually implementing the reforms. The reforms are then implemented internationally, so there is less (no) scope for capital outflows to destabilize currencies. And governments, who have been greatly enriched in the process, have their credit creation powers removed from them in the last stage of the process. Their ability to engage in monetary adventurism will be eliminated as a result of the full and final privatization of the mutuals.

c) Inflation Risk from the Abuse of Fiscal Power

Under both proposals – but especially the Huerta de Soto proposal – there are significant wealth transfers to government. This creates tremendous scope for government to abuse of its fiscal powers.

Indeed I am deeply conscious of the irony of my position when – having roundly castigated Kumhof/Benes for recommending transfers to indebted private individuals – I happily sign up to a plan which sees even bigger transfers towards arguably the most profligate of all economic agents – the government itself!!

Kumhof/Benes kindly make the point that (atleast in a monetary context) governments are not de facto profligate, and would not generally be expected to behave in a destabilising manner (pp 17-18). I don't personally buy that and would recommend that, alongside the Huerta de Soto monetary proposals, there should be strict fiscal rules – see next section.

So, yes, common sense suggests there will be inflationary consequences, but – as I will argue in the conclusion – these risks can be largely mitigated under the Huerta de Soto plan. By contrast,

under Kumhof/Benes I think the risks would be much more significant – an aggressive Stalinist policy to take control of the commanding heights of the economy and go for maximum growth – strikingly reminiscent of those infamous Five Year Plans invented by bureaucrats in the now defunct USSR.

Nevertheless, there are also elements of the Huerta de Soto Plan which I have problems with and will discuss next.

VII SOME CRITICAL OBSERVATIONS ON THE PRACTICALITY OF THE HUERTA DE SOTO PLAN AND MY PROPOSAL FOR A WORKABLE VERSION OF THAT PLAN

In proposing a global solution Prof. Huerta de Soto's rationale presumably is that any country attempting a radical reform of its banking system by itself will risk extreme capital flows that could destabilise the whole process.

However, it also means that the likelihood of ever implementing any reform is greatly diminished. It is hard enough for politicians to agree domestically to any package of far reaching reforms – let alone internationally. And to sustain such agreement over time will be difficult – especially given political regime changes, the possibility of new conflicts arising in other areas etc. There is also considerable scope for exogenous shocks which derail all attempts at uniformity in monetary growth and put paid to the whole idea of sustaining any global fixed exchange rate regime.

Instead of getting a monetary system for the 21st century, we'd be lucky if we got one in time for the next millennium.

So, some country needs to bite the bullet and go for it unilaterally. But what sort of country?

If the country that tried this unilaterally was a small open economy and/or a net debtor to the world and/or had an exceptionally large banking system in relation to its GDP, any attempt to go it alone with the Huerta de Soto plan would be sheer suicide.

I am thinking especially of the UK. Not only would this sort of plan be revolutionary, but it is quite likely that most people (including market professionals) would simply not understand what was going on. There would be massive capital flight, the damage to London as a financial centre would be irreparable and foreign banks (of which there are many) would most likely exit the country en masse.

It might work for the US despite the fact that the US is a major net debtor nation – actually precisely because it is such a large net debtor nation and the issuer of the world's reserve currency. The Japanese, Chinese and all others holding dollar assets wouldn't really have anywhere else to go (look at what little impact QE has had on the dollar) and actually might quite like the idea of swapping some of their Treasury assets for mutual shares. The remaining Treasury stock could just be amortised over time.

The two problems in the US case are an Anglo-Saxon macro-economics heritage which views the Austrian School much like the Cameron Tories view the traditionalists within their party (AKA UKIP) – as a bunch of swivel-eyed loons. So they probably would never accept the Huerta de Soto plan – and definitely not in its purist form with all that guff about free markets in credit.

And the second problem is an overwhelmingly powerful banking lobby that would fight this tooth & nail. Indeed, Kumhof/Benes note in their paper that the original Chicago plan had very strong and broad-based intellectual support and was proposed at a time when bankers were hated and far reaching reforms to banking would have been welcomed with open arms. Yet the banking lobby still managed to kill it stone dead.

It could potentially work very well for the Eurozone, except it is impossible to see governments across so many different countries reaching agreement – just look at the difficulties they are having over a euro-wide bank bail-out arrangement. That is simple stuff in comparison to the Huerta de Soto proposal. (It might actually have worked quite well for Germany in the deutschmark days – given the supportive economic heritage – but that opportunity has long since passed.)

The two countries where this could work really well are:

- Japan – which is still a massive net creditor nation, and where government debt levels have reached stratospheric heights – albeit most held domestically. The Japanese Government may well be attracted to something that not only reforms the banking system but also doubles up as a fiscal bomb defusal strategy; and
- China – with a still developing monetary system, a relatively closed financial system and, most importantly, an autocratic enough policy process fully capable of overriding vested interests if those at the top really want to implement change.

So, to the details.

1. A Return to the Gold Standard - Really?

I am happy with the Huerta de Soto plan going all the way to full privatization of the mutuals at Stage 6. But the proposal to then adopt a new gold standard makes me pause.

The Huerta de Soto proposal for a new gold standard at the penultimate stage of his plan is very much pitched at the global level. He does not spell out the exact mechanics, but one presumes he has the original Gold Standard in mind, ie a system where the monetary base in each country was directly convertible at a specified rate to gold held in the relevant central bank.

I remember Prof. Huerta de Soto pointing out in his lecture that the Classical Gold Standard never actually did the job it was intended for because, under the fractional reserve system, central banks never really achieved effective control over the credit creation process. Because of banks' ability to create excessive credit in upturns – which resulted in booms – and then withdraw that credit in downturns – which resulted in very nasty busts – the fluctuations in the business cycle were greatly accentuated. The Gold Standard then forced the hand of central banks to make even further adjustments to the (limited) monetary instruments at their disposal thereby forcing interest rates ever higher during the bust and making everything a good deal worse.

It gave the Gold Standard a very bad name (unfairly in Prof. Huerta de Soto's opinion).

Under his plan, these booms and busts would simply not happen – at least not so severely – so gold should provide an effective anchor to retain monetary discipline.

I have three problems with this. First, it is unfortunate he does not fully spell out the mechanics by which one might return to a new gold standard. Because no greater a gold bug than the World Gold Council notes:

Returning at today's gold price does not seem feasible, as concern over the value of fiat currencies would no doubt see households redeeming fiat currencies en masse for gold, which would quickly deplete central bank's gold reserves. They would soon be off the gold standard.

(http://www.gold.org/government_affairs/gold_as_a_monetary_asset/role_in_international_monetary_system/major_trading_economies_return_to_gold/)

Second, once mutuals have been fully privatized and all government credit has been removed, why is there any need to have a gold rule? The demand for money will be driven purely by market forces. As the primary lending vehicles in the global economy, mutuals will not be allowed to take credit – of the private or government variety. In such a system, governments will be playing an entirely passive role in the provision of notes and coins to banks. The banking function will be almost entirely a clerical one. On the mutual side, mutuals will be making loan decisions based on the appropriate criteria and market-driven assessments of the profitability and riskiness of the projects/purchases which their loans will be funding. What exactly will the gold standard contribute to this process?

(Paradoxically, I think a Gold Standard would be essential in the Kumhof/Benes framework, where government credit plays a central role in the credit creation process.)

A third and related objection – shared with most mainstream economists – is that you are tying the volume of credit in an economy to an arbitrary volume of a physical commodity. That may be fine at the beginning, but what happens as economic

output increases – driven by optimal resource allocation and efficient capital pricing – and with it the transactions demand for cash. With the supply of cash artificially constrained by the fixed volume of gold, will that not artificially distort the price of credit itself – or have I missed something obvious here?

Of course, all this discussion is redundant in the context of a country unilaterally adopting the Huerta de Soto proposal. The Gold Standard was by definition an international standard.

2. The Importance of Fiscal Rules

As noted previously, both the Kumhof/Benes and Huerta de Soto proposals confer immense fiscal power on governments. Kumhof/Benes think this is a positive aspect of their plan, and governments should use this power pro-actively. I don't.

It is imperative that governments adopt some strict fiscal rules. This is especially important where a country pursues the Huerta de Soto plan on a unilateral basis. Because this country will be inflating its monetary assets on a massive scale, markets must be convinced that the government will behave responsibly post-transition.

Prof. Huerta de Soto fully recognizes the importance of governments needing to adhere to fiscal discipline. One reason why Prof. Huerta de Soto recommends the adoption of a new Gold Standard is to impose strong fiscal discipline on governments. His idea is to impose a golden strait jacket on the monetary system so any attempt by government to indulge in a fiscal splurge will ultimately be stymied by the physical limitation on the money supply.

To me this is a second best solution to the fiscal problem although I entirely empathize with Prof. Huerta de Soto's concern about how to effectively constrain government's fiscal power.

The first best solution would be to impose strict fiscal rules. Broadly there are two areas where the rules need to apply.

First, it is extremely important that the assets newly acquired by government do not find their way into current spending plans. Nor should they be applied to «infrastructure-boosting» capital plans – however well intentioned. The temptation to

extend the London Underground network to every major city in the UK will be enormous, or better still to commission a new millennium dome every six months – but these temptations must be resisted.

Instead the cash should be held in trust in segregated accounts, or injected into a sovereign wealth fund with investments only to be made abroad. Think of it as akin to an extreme open market operation, where cash is simply withdrawn from the system on a semi-permanent basis. This might go some way to offsetting the huge expansion of the monetary assets in the transition phase – especially in relation to the government's balance sheet.

The endowment trusts of certain Oxbridge colleges provide a good example of the sort of thing I am proposing. These endowments generally leave their beneficiaries very asset rich, but extremely cash poor for decades – even centuries.

Second, strict rules should also apply to budget plans. Governments which have suddenly seen their debt written off and will probably find themselves in a handsome net surplus position (now that interest payments are zero) should adopt a «surplus» budget rule which could work something like this. The government should evaluate what percentage of GDP would constitute a trend surplus over the normal course of a business cycle, and then set budget plans to hit that target.

The surpluses that are generated should also be held and accumulated in segregated funds, or invested in the sovereign wealth fund through segregated accounts. If the country should face a severe enough downturn for the government to end up in deficit, then and only then should there be a draw on the surplus assets.

This is all extremely optimistic – I know. It will be a rare governing politician who would be able to resist dipping his fingers into this pie. And how one is able to make such rules binding is an open question.

3. The Abolition of the Central Bank - Impractical

Finally, Prof. Huerta de Soto proposes abolishing the central banks as part of the transition to a gold standard and then to new

monies. As much as I like the sound of this idea, you still need some agency to regulate what is going on – even if it no longer gets to set interest rates.

Someone has to provide cash to the banks and mutuals when required. Someone has to monitor these bodies to ensure nothing dodgy is going on and they are following the rules. And if some new currency – like the bitcoin – happens to come along someone needs to ensure that people don't lose their shirts over it. After all, nothing would undermine this fantastic new banking system faster than discovering that the reserves held within were worthless because some dodgy exchange somewhere else had blown up.

These are all necessary functions to make the new system work and give it credibility. Central banks contain an army of highly educated and highly trained functionaries with an excellent understanding of finance, who will all presumably be looking for new jobs in the post-transition world. Why not let them do this work. Whether you still want to call the operating entity a central bank or something else really is a matter of semantics.

VIII

SUMMARY AND CONCLUSION: THE HUERTA DE SOTO PLAN - CAN IT DELIVER THE «OPTIMAL» QUANTITY OF CREDIT?

Every economics textbook will tell you that banking is at its core a process of intermediation designed to facilitate the transfer of savings into investment.

In some respects fractional reserve banking does this much too well. It is a system which takes deposits and lends them out. The problem is that this process is built on – for want of a better word – deceit. Borrowers are offered secure term contracts (subject to the usual covenants about having to pay interest etc), while depositors are promised their money back whenever they want it. This deceit only works because most depositors are happy to keep their money in the banking system most of the time.

Supporters of fractional reserve banking would say – so what. The fact that the system exploits this trait of depositors – to keep

their money in banks rather than under their mattresses – is surely a good thing. Without such a system, lending would not happen to anywhere near the same degree, credit creation would be severely impeded and economic activity adversely affected.

The problem with this system is that it has a tendency to max out on credit creation in the good times, but chronically undersupply credit in the bad times – thus greatly accentuating the natural ups and downs of the business cycle. And over a course of time, it results in an accumulation of debt in society that is not economically very healthy. Recent events underline these concerns.

Any proposed reform of the banking and monetary system needs to be able to illustrate that such a system will be capable of delivering the «right amount» of credit in good times and bad – so as not to impede economic activity in downturns, but also not to act as an accelerator for the good times. We can refer to this as the «optimal» quantity of credit over the course of the business cycle.

Would the Kumhof/Benes or the Huerta de Soto plans be capable of delivering the «optimal» quantity of credit, or might they result in something not so good?

At the starting point post-implementation, we know that both plans result in greatly expanded balance sheets. In particular, the financial system's balance sheet is increased significantly in size – due to the injection of government money. The only reason this is not incredibly inflationary is because it exploits the same trait amongst depositors which fractional reserve banking also exploits – namely the tendency to keep one's money in the bank.

However, they can give rise to some potentially very inflationary and damaging behavioural effects through four channels.

First, under the Kumhof/Benes proposal, the transition results in the destruction of an entire breed of credit – ie mortgage and consumer loans – with a corresponding transfer of wealth to that cohort in society which will have the highest propensity to spend.

Second, again under the Kumhof/Benes proposal, the cost of credit is greatly reduced because it is funded directly by government money. As a consequence, this is likely to result in a maximization of credit creation for investment purposes – that is not

the same as delivering an «optimal» amount of credit for business – and so is likely to be inflationary.

Third, again under Kumhof/Benes, it puts monetary policy at the heart of the credit creation process in a way that is far more effective (and therefore also potentially destructive) than under the current system. Some people might believe this is a good thing – certainly the Chicago School does – but is policy set from above really capable of delivering an «optimal» quantity of credit?

The final channel is the fiscal one. Both Kumhof/Benes and the Huerta de Soto plans are vulnerable to this. I have argued in favour of instituting strong fiscal rules in the latter case to keep government fiscally neutral through the business cycle as far as possible. Others believe that the fiscal power conferred on government should make them more interventionist – not less.

The first channel does not apply to the Huerta de Soto plan. The second and third will also not be as damaging – in the way that it is to Kumhof/Benes – because of the very strong pro-market underpinnings of the Huerta de Soto plan.

But does this imply that the Huerta de Soto plan could result sometimes in the under-supply of credit – especially in bad times.

Here, we come to the oldest debate in modern economics.

The Austrian thesis is that efficient market-driven pricing of goods and services will result in much more efficient allocation of resources. As a consequence, much of the volatility in the business cycle will have been naturally smoothed. Once you replace fractional reserve banking with the Huerta de Soto plan, and also free up the market for credit – allowing the market (and not the central bank) to price credit – then the situation should not arise where there will be an over or under supply of credit – resulting in the over-utilisation or under-utilisation of resources. This paper has described the mechanics of such a credit system.

In his book Prof. Huerta de Soto covers this subject in great detail. He sets out a highly sophisticated exposition of the workings of the economy and, I think, delivers a very convincing case for allowing market signals to drive economic behavior.

Here I set out a highly stylized – and not at all sophisticated – version of how one might imagine the process to work.

In the upward phase of the business cycle, firms spot opportunities for investment and seek to exploit those. This in turn increases the demand for credit, which raises the returns on offer for loans/investments. That attracts in savers who are earning zero – possibly even negative – interest on their savings in the now fully reserve-backed and entirely risk free banking system.

(Interest rates may now be negative in the banking system because there will be a service charge imposed by the banks for safeguarding deposits and to cover the transaction costs of monetary transactions, payment systems etc. And since cash in the bank is now genuinely held at zero risk, there is no reason why it should earn interest.)

As output increases, this has initially positive effects, raising incomes, boosting demand still further and pushing up prices. Eventually the business cycle peaks as capacity constraints are hit, and the rising cost of inputs start to reduce profitability. This in turn impacts capital returns

which in turn start to reduce the return to investors. Projects are cancelled. Eventually, output starts to fall and, with it, prices and incomes. Demand starts to fall as we enter the downward phase of the business cycle. There may be business failures and losses. The demand for credit will also fall, and investors have a preference to start withdrawing their cash from investments – returning it to the safety of their deposit accounts. Interest rates start to come down.

The increase in spare capacity pushes input prices back down – eventually at a faster rate than the fall in output prices. Profitability starts to increase again. The combination of this process and falling interest rates makes certain investment projects start to look attractive, as hurdle rates on capital projects are met. Output begins to increase again, driving up income and demand, and so the cycle begins again.

At no stage in this process is there any need for governments or central banks to influence the price of credit. That will happen naturally as a result of market pressures, and the commercial decisions of borrowers and investors. It should also be a much smoother and less disruptive process than currently occurs, now that banks are no longer vulnerable to runs. Investors in mutuals may even

taken a longer term view, and not immediately look to withdraw their investments. And mutuals themselves are not leveraged, so the potential for default no longer exists.

By contrast, under the fractional reserve system, banks are highly leveraged and will start to panic once losses start to hit. This is because they only have thin capital buffers, and once the equity layer starts to be eroded they are not far from reaching the threshold of default. As a consequence, loans will be called in a lot faster, and the willingness to lend at all will rapidly disappear with a credit crunch developing – where the supply of credit simply becomes inelastic to price in a very short space of time.

As each bank tries to protect its balance sheet in this way, the system wide effects are made that much greater with even worse second round consequences. Hence, even moderate downturns in the business cycle have the potential to turn into really nasty recessions – even slumps.

Of course, central banks can push against this string all they like by slashing interest rates far below where the normal market driven process would take rates, but the process of lending and investment will not take off until bank balance sheets have been adequately repaired. Hence, not only are downturns likely to be more extreme in this system, but also a good deal more protracted.

Then, with interest rates held much lower and for far longer than under free market conditions, pent-up demand builds and builds until the upturn begins and credit once again starts to flow. Because of artificially low interest rates, hurdle rates for investments are set far lower, so many more projects are earmarked for investment. The upturn becomes a boom, with far greater excesses of lending, more rapid growth in output and demand than under the free market system, and the whole process is set up for the next bust.

It is now a generally accepted tenet of economics that – through the effective application of pricing signals – the free market is best placed to deliver the optimal allocation of resources in goods and services. If one accepts that wisdom, then why not also apply it to the market for credit. The credit markets remain the final and strongest bastion of interventionism. But what makes credit so different to these other markets?

At the core of the Austrian thesis lies the belief that the best thing that government can do is to keep out of the way of market forces – and not just in the market for goods and services but also critically in the market for credit. And it is a persuasive view.

By contrast, when one strips it down to its mechanics, although the Chicago Plan looks in so many respects like the mirror image of the Huerta de Soto plan, the ethos driving it is precisely the opposite. The proponents of the Chicago Plan hate fractional reserve banking because it diffuses the government's control over the market for credit. In killing fractional reserve banking they intend for government finally to be able to establish a definitive monopoly over the market for credit – even to the point of dictating what sort of credit is to be made available.

But when has monopoly ever been considered a good thing, or capable of delivering the optimal economic outcome?

The one glitch to creating a free market in credit is that it has never really been tried. Theory suggests it ought to work in normal circumstances. But economies can be subject to destabilizing external (exogenous) shocks. In the long term, if all is left to market forces, balance should eventually be restored but the adjustment process could be a very painful one. Giving markets free reign and promising that government will never again intervene may not deliver the best economic outcome in all scenarios.

And it is also an entirely silly hypothetical proposition. We live in democracies. When times get tough, policy becomes interventionist because only the politicians who promise to solve problems will get elected – which means most politicians standing for election will be supporting intervention of some form or other.

So, in very adverse situations, one needs to accept reality and admit that there will be intervention. But what sort of intervention should be preferred?

I would argue strongly that – once created – one should not attempt to distort or unravel the market for credit. Governments should not try to influence credit pricing or indeed the quantity of credit (eg by reintroducing government credit and reestablishing a government stake in the mutuals). That could cause severe long term damage to the credit market infrastructure, and prove very hard to unravel.

However, there is a readily available alternative channel – fiscal policy. The great advantage of both Kumhof/Benes and Huerta de Soto proposals is the tremendous fiscal power which they confer on government. I have argued that this power needs to be conserved and strict fiscal rules applied.

So, let the Huerta de Soto plan run as formulated for normal times – with minimum (ideally no) government intervention and strict fiscal neutrality. It should deliver the optimal outcome in normal circumstances. But in emergencies, when something very bad happens and this creates significant under-utilisation of resources, government should be able to exploit its fiscal war chest as necessary to offset that.

Since intervention will happen anyway – regardless of any prior rules set down – this form of intervention would be preferable to the other type.

**ANNEX:
CENTRAL BANKS AND QUANTITATIVE
EASING - HOW TO INCORPORATE THESE INTO
THE HUERTA DE SOTO PLAN**

The plans presented in the main paper omitted central banks (CBs) from the framework.

The omission of CBs facilitated exposition and their inclusion does not have any impact on the the end result in either the Kumhof/Benes or Huerta de Soto plans. In this annex I will show how to work CBs into the framework.

This will also help to shed light on Quantitative Easing (QE). QE is considered to be the most radical monetary experiment of modern times and economists are very unsure of its long term impact – in particular the consequences of unwinding it. The Huerta de Soto (or for that matter Kumhof/Benes) plans provide the answer.

**I
EXPANDING OUT THE FRAMEWORK**

As well as showing banks and govt, let's bring in two other players – the non-bank private sector (NBPS) and the central bank. The tables below show the balance sheets of each of these players (Figure 1A).

Note that I have introduced a couple of additional categories into the asset side of the banks' balance sheet. They hold 10 units of notes and coins and 10 units of reserves at the central bank (Figure 1B).

The NBPS holds 20 units of notes and coins and part of its liabilities are the 140 units borrowed from the banks (Figure 1C).

The central bank holds 10 govt bonds. These are an asset on its balance sheet. Its liabilities include the 10 units of reserves from the banking system and the 30 units of notes and coins in circulation (ie the sum held by the banks and the NBPS).

The Govt balance sheet is the same as before. Note that the sum of govt bonds held by the banks, NBPS and CB total 80, which is the stock of govt debt outstanding.

FIGURE 1A

Banking System			
GOVT BONDS	40	DEPOSITS	184
NOTES & COINS	10		
RESERVES HELD WITH CBs	10		
LOANS	140		
		EQUITY	16
	200		200

FIGURE 1B

Non-Bank Private Sector			
GOVT BONDS	30	BORROWING FROM BANKS	140
NOTES & COINS	20		
OTHER ASSETS	250	OTHER LIABILITIES & EQUITY	160
	300		300

FIGURE 1C

Central Bank			
GOVT BONDS	10	COMMERCIAL BANK RESERVES AT CENTRAL BANK	10
NET OTHER ASSETS	30	NOTES & COINS	30
40		40	
Government			
OTHER NET ASSETS	80	GOVT BONDS	80

1. Stage 1: Banks deposit cash with the CB

Banks decide to deposit 5 units of their cash at the CB (Figure 2A).

This has two effects on their balance sheet. First, notes and coins drop to 5 and, second, their reserves at the central bank increase by 5.

Correspondingly this affects the liability side of the CB’s balance sheet. Notes and coins drop by 5 to 25 because there has been a diminution of cash in circulation by 5 units, but banks’ reserves held at the CB has gone up by 5 to 15 units.

Note that the total size of the banks’ and CB’s balance sheets have not changed as a consequence of this transaction.

2. Stage 2: QE

The CB now decides to undertake QE by buying 20 units of govt bonds from the banks. It does this by crediting the banks’ balances at the central bank by 20 units (Figure 3A).

The effect on the banks’ balance sheet is to decrease govt bonds by 20 and to increase reserves at the CB by 20. Note again that there is no change in the total size of the banks’ balance sheet (Figure 3B).

FIGURE 2A

Banking System			
GOVT BONDS	40	DEPOSITS	184
NOTES & COINS	5		
RESERVES HELD WITH CBs	15		
LOANS	140		
		EQUITY	16
	200		200

Central Bank			
GOVT BONDS	10	COMMERCIAL BANK RESERVES AT CENTRAL BANK	15
NET OTHER ASSETS	30	NOTES & COINS	25
	40		40

By contrast, the CBs’ balance sheet has now increased by 20 units. Its holdings of govt bonds has gone up to 30 on the asset side, and correspondingly, banks’ reserves have increased to 35 on the liability side.

3. Stage 3: Banks draw down cash from CB

The banks now spot a lending opportunity and decide to draw down their reserves at the CB by 15 units in order to fund this (Figure 4A).

Notes and coins on their balance sheet are boosted by 15, while the reserves held at the CB drop by 15. Correspondingly,

FIGURE 3A

Banking System			
GOVT	20	DEPOSITS	184
BONDS			
NOTES & COINS	5		
RESERVES HELD WITH CBs	35		
LOANS	140		
		EQUITY	16
200		200	

FIGURE 3B

Central Bank			
GOVT BONDS	30	COMMERCIAL BANK RESERVES AT CENTRAL BANK	35
NET OTHER ASSETS	30	NOTES & COINS	25
60		60	

now that 15 notes and coins are back in circulation, these increase as a liability on the CB balance sheet, and at the same time banks’ reserves at the CB fall by 15 (as a liability item).

4. Stage 4: Banks lend out the cash

Banks now decide to make a loan of 15 units to the NBPS (Figure 5A).

As a consequence, loans increase to 155 while notes & coins drop to 5 (Figure 5B).

FIGURE 4A

Banking System			
GOVT BONDS	20	DEPOSITS	184
NOTES & COINS	20		
RESERVES HELD WITH CBs	20		
LOANS	140		
		EQUITY	16
200		200	

Central Bank			
GOVT BONDS	30	COMMERCIAL BANK RESERVES AT CENTRAL BANK	20
NET OTHER ASSETS	30	NOTES & COINS	40
60		60	

As a result of the loan, the NBPS’ holdings of cash have increased from 20 to 35, and their liabilities (borrowings from the banks) have correspondingly also gone up.

QE has been a success! The NBPS balance sheet has increased in size and, once the NBPS spends that extra cash, economic activity will have been stimulated.

5. The QE conundrum

But note the mighty conditional in all of this. This assumes that the banks decide to make the loan in the first place. If they felt that conditions were still tough, ie banks were in capital preservation

FIGURE 5A

Banking System			
GOVT BONDS	20	DEPOSITS	184
NOTES & COINS	5		
RESERVES HELD WITH CBs	20		
LOANS	155		
		EQUITY	16
200		200	

FIGURE 5B

Non-Bank Private Sector			
GOVT BONDS	30	BORROWING FROM BANKS	155
NOTES & COINS	35		
OTHER ASSETS	250		
		OTHER LIABILITIES & EQUITY	160
315		315	

mode and did not want to make any loans, then they would not draw down their reserves at the CB, and QE would have no impact on activity.

This is the great problem with fractional reserve banking and perhaps easier to understand now. With interest rates at or near zero, it really will not matter how much stimulus the CB attempts through QE. If banks don't want to lend and would prefer to sit on their deposits at the central bank, then there will be no boost to activity. This is the liquidity trap highlighted by Keynes.

(Of course, at the margins there will be some positive impact on activity – even if the banks are not lending – because the process of QE bids up govt bond prices and causes yields to drop along the yield curve. In countries like the US where mortgage rates are directly related to the long end of the yield curve, there will be positive stimulus to the housing market. But this is paltry compared with the vast amount of liquidity that the CB is making available to the banking system – which is simply not being utilized.)

But the other problem with QE is that, over time, it might end up working all too well. Once credit fears recede, risk appetite returns, and the banks feel their balance sheets have mended sufficiently, they will be in a position to lend and the appetite for credit will be there. But now, QE will have handed the banks this awesome arsenal of liquidity with which to do the most enormous damage.

To avert such an outcome, central banks will eventually have to reverse QE. But here is the problem. The major central banks have massively increased the size of their balance sheets with government bonds holdings – one might almost say they have cornered their respective govt bond markets, and everyone knows it. How do they unwind something that big? The impact on bond yields would be severe and very destabilizing. It is also possible that, as yields increase over time (especially with the market beginning to sense that CBs will turn from buyers to sellers) CB balance sheets could suffer major losses – which presumably will have to be absorbed by the taxpayer.

But now let's see what happens when one implements the Huerta de Soto Plan (one could equally do this with the Kumhof/Benes plan).

II

THE HUERTA DE SOTO PLAN REVISITED

Let’s start by creating mutuals, hiving off some loans to them, and injecting the banks with Treasury Credits.

FIGURE 6A

Banking System			
NEW RESERVES	165	DEPOSITS	170
Notes & Coins	5		
GOVT BONDS	20	TREASURY CREDIT 165	
RESERVES HELD WITH CBs	20		
LOANS	141		
		EQUITY	16
351		351	
Mutuals			
LOANS	14	SHARES IN FUNDS	14

This time only 165 Treasury credits have been created in order to credit banks with 165 in reserves against the 170 of deposits. The shortfall of 5 reflects the presence of notes and coins already held by the banks, which are now added to the newly created reserves, and used to fully back the 170 of deposits (Figure 6B). Correspondingly, there are changes to the Govt balance sheet, but the CB balance sheet remains as before.

FIGURE 6B

Government			
OTHER NET ASSETS	80	GOVT BONDS	80
TREASURY CREDIT	165	Newly Created Equity: RESERVES ISSUED TO BANKS	165
245		245	
Central Bank			
GOVT BONDS	30	COMMERCIAL BANK RESERVES AT CENTRAL BANK	20
NET OTHER ASSETS	30	NOTES & COINS	40
60		60	

1. Internalising the CB balance sheet

Now let's bring the CB and govt balance sheets together (Figure 7A).

It is worth noting here that central banks are separate legal entities to governments with their own charters, governance structures and balance sheets. The Bank of England, for example, when first established in 1694, was a private entity with private shareholders. It was nationalized as late as 1946, and is still a quasi-independent entity – indeed its status is an independent public organization which is owned by the Treasury Solicitor on behalf of the Government.

So, one should not understate the legislative complexities of such an action – although these would pale in comparison with the legal work required to implement the entirety of the Huerta de Soto plan.

But let's assume the CB's balance sheet can be internalized (Figure 8A).

FIGURE 7A

Government			
OTHER NET ASSETS	80	GOVT BONDS	80
TREASURY CREDIT	165	Newly Created Equity: RESERVES ISSUED TO BANKS	165
Former Central Bank B/S			
GOVT BONDS	30	COMMERCIAL BANK RESERVES PREVIOUSLY AT CENTRAL BANK	20
FORMER CB NET OTHER ASSETS	30	NOTES & COINS	40
305		305	

FIGURE 8A

Consolidated Government B/S			
OTHER NET ASSETS	80	GOVT BONDS	50
TREASURY CREDIT	165	Newly Created Equity: RESERVES ISSUED TO BANKS + NOTES & COINS IN CIRCULATION	205
FORMER CB NET OTHER ASSETS	30	COMMERCIAL BANK RESERVES PREVIOUSLY AT CENTRAL BANK	20
275		275	

The 30 govt bonds previously constituting assets on the CB balance sheet can now simply be offset against the liability side of the govt’s balance sheet.

In addition, notes and coins can be treated as equity and added to the 165 of equity generated from the creation of Treasury Credits. That then leaves the 20 units of banks’ reserves as liabilities.

2. Moving to the Huerta de Soto Plan

On the banks’ side, the outstanding stock of 20 govt bonds and 20 reserves (formerly deposited with the CB, but now with the govt) can be cancelled by an offset reduction in Treasury credit.

FIGURE 9A

Banking System			
NEW RESERVES	165	DEPOSITS	170
Notes & Coins	5		
LOANS	141	TREASURY CREDIT	125
		EQUITY	16
311		311	

The Govt balance sheet correspondingly also changes with the disappearance of banks’ reserves from the liability side and the reduction in stock of govt bonds to just 30 units (Figure 9B).

There are three things to highlight here:

First, we are now back to Stage 3 of the Huerta de Soto Plan (albeit with slightly different numbers), and can progress to the next few stages. Nothing fundamentally has changed.

FIGURE 9B

Consolidated Government B/S			
OTHER NET ASSETS	80	GOVT BONDS	30
TREASURY CREDIT	125	Newly Created Equity: RESERVES ISSUED TO BANKS + NOTES & COINS IN CIRCULATION	205
FORMER CB NET OTHER ASSETS	30		
235		235	

Second, there is no need for banks to be physically endowed with 170 reserves of notes and coins on the asset side of their balance sheet. At least, some of you would have been trying to conceptualize what form these reserves would take. The banks might hold a few notes and coins to ensure that they are able to meet the normal day-to-day transactions demand for cash from their customers. But the vast bulk of these reserves could simply be an electronic entry on the asset side of their balance sheet, matched by a corresponding electronic entry on the equity side of the govt’s balance sheet. Whenever the banks need to draw on some extra cash, the govt can simply print it off for them. For example, if the banks’ assets were 165 reserves (held in electronic form) and 5 actual notes and coins, then by – say – drawing down a further 5 notes and coins – the asset composition would change to 160 reserves (electronic) and 10 notes and coins. There would be no change to the government’s balance sheet since notes and coins are treated as equity.

(It is also worth noting that although in the UK the Bank of England has an almost total monopoly on the supply of notes and coins, it has actually contracted out the printing of notes to De La Rue since 2002. There is no reason why the government could

not continue with that arrangement post-transition. In fact, it does not even need to be involved in the process – the banks can just ask De La Rue for whatever notes they need and make the appropriate accounting changes on their balance sheet.)

Third, the conundrum posed by QE has been resolved. There will no longer be any QE-driven liquidity-fuelled credit binge, especially under the Huerta de Soto plan, where mutuals' access to funding will be entirely equity based. And of course the issue of how CBs unwind all their government bond holdings from their balance sheet is now redundant.

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