How to be Prepared for the Bursting of the Real Estate Price Bubble?

by

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1. Introduction

It is increasingly evident that there is already a significant excess supply of residential housing units in almost all the cities, large and small, in China. Data on actual electricity use by residential housing units suggest that the proportion of sold (hence non-developer-owned) but unoccupied units is at least 25 percent of the total number of units in many of the cities. If the unsold (and hence unoccupied) units held by the real estate developers are added to the owned but unoccupied units, the vacancy rates are even higher and exceed 40 percent in some of the cities. It is clear that no more residential housing units should be developed or built in these cities for at least quite a few years, and certainly not in their current price range, which is unaffordable to the majority of the households living in these same cities. Building additional units of such unaffordable residential housing units is a total waste of the resources of the society.

Why, in the face of such a huge excess supply, is the price of residential housing units not falling, or falling faster, in China? Why is the market not able to play a more decisive role, as advocated in the resolutions of the Third Plenum of the Eighteenth Central Committee of the Chinese Communist Party, in this instance? It turns out that quite a few different powerful interest groups in China support maintaining the current price levels of residential real estate, but each for its own reasons. These will be discussed below. However, it is debatable whether any of these reasons is compatible with the best interests of the Chinese nation as a whole.

[1] The author is Ralph and Claire Landau Professor of Economics, The Chinese University of Hong Kong, and Kwoh-Ting Li Professor in Economic Development, Emeritus, Stanford University. The author is grateful to Mrs. Ayesha Macpherson Lau for her invaluable comments and suggestions. A version of this paper is published in Chinese in Bijiao (Comparative Studies). All opinions expressed herein are the author's own and do not necessarily reflect the views of any of the organisations with which the author is affiliated.

2. Arguments for not Letting the Price of Real Estate Fall

What are some of the arguments for leaving the real estate price bubble alone for now, even though almost everyone realises that the current price level of real estate may not be sustainable? First, the local governments, which have come to consider the land under their control to be their most important source of "revenue," want the price of land to be both high <u>and</u> rising. The price of local land cannot remain high and rising unless the price of local real estate also remains high and rising, which in turn depends on a high and, over time, rising local demand for residential real estate as well. This is also the reason why there is so much resistance from local governments to the introduction of a small local property tax, even though they themselves are supposedly the actual long-term beneficiaries of such a tax. They fear the possible short-term negative effect of the imposition of a property tax on the local demand for real estate, especially residential real estate. The local governments will therefore try to do their best to prop up the price of residential real estate by keeping the price of land available for new development high, including withholding any additional land from the market;[2] by discouraging the real estate developers from reducing the prices of their products; and more importantly, by using their influence on the local bankers to make sure that they continue to provide credit to the local real estate developers. "Pricking" the real estate price bubble now will deprive the local governments of their most important source of revenue and put a halt to what they may consider to be their most important economic activity for generating local GDP and employment.

Second, the real estate developers also do not want the price of their products to fall, which will directly impact their revenues and profits negatively. As long as they can manage to have access to credit, even at exorbitant rates of interest of as high as 20 percent per annum, they will hold their products off the market rather than reduce the price, hoping for an eventual turn-around. Those real estate developers who did not have to pay for the full price of the land in cash may be able to hold out for a longer time. The real estate developers have even come up with a fancy excuse for not reducing the price of their new products—they claim that if they reduce the price of their new products, then the customers who bought their old products might

[2] In some instances, this is supposedly done at the instructions of the central government.

demand a refund, or at least a refund of the price difference! This is a most spurious argument: if extended to its logical conclusion, the prices of all goods and services as well as stocks and bonds cannot be reduced, because previous purchasers will demand refunds of the price differences. Then there will be no downward price flexibility in the market whatsoever. In addition, it also begs the question of whether the suppliers of the goods and services should be entitled to recover the price differences from their previous customers when the prices of goods and services are raised.[3]

The stark reality is that the demand for residential housing is unlikely to increase any time soon in many cities. The supply glut in residential housing units is not going to disappear for a long time. Thus, piling up more and more debt on the part of the real estate developers only makes the eventual resolution much more difficult and painful, not only for them, but also for the lenders and the housing unit owners who bought at the top of the market. What the real estate developers need at this time is not more debt but more capital if they want to survive the residential housing cycle.

Another idea that has been suggested to solve the problem of the supply glut of residential housing units is to accelerate the pace of urbanisation, luring residents currently living in the rural areas to move to the urban areas and occupy these unoccupied units. However, unless these new urban residents can be provided sustainable gainful employment, more problems will be created than solved by their move to the cities.

"Pricking" the real estate price bubble now may lead to the bankruptcy of some real estate developers, especially the smaller ones, but the reality is that this is bound to happen sooner or later given the huge excess supply in the residential housing market of many cities. Moreover, no one can expect bankrupt real estate developers to refund the price differences.

Third, the banks and financial institutions also do not want to see a fall in the price of real estate because that will diminish the value of the collateral they hold against their outstanding real estate loans to perhaps even below the value of the loans

[3] The only customers who may possibly have a legitimate basis to demand a reduction in their prices are those who have prepaid for their residential housing units but the real estate developers fail to meet their pre-committed delivery deadlines.

themselves. This in turn implies that the lending banks will have to increase their provisions for loan losses and may require raising new capital. It also implies that the borrowers will have "negative assets" on their hands, which will likely lead to loan defaults, resulting in a rise in both the absolute value and the ratio of their non-performing loans. Moreover, even if the banks and financial institutions are able to foreclose and recover the property of the defaulted mortgage loans successfully, they will still have to take a loss equal to the difference between the market value and the outstanding loan value of the property. If the fall in the price of real estate is large enough, it may cause widespread defaults in real estate loans and affect the solvency and viability of the banks and financial institutions with large concentrations of real estate loans to both real estate developers and homeowners. Thus, the real estate price bubble must be "pricked" very carefully so that stability of the overall financial system is not affected. The best thing that can happen is if these real estate mortgage loans can be taken off the books of the lending banks and financial institutions.

Fourth, the homeowners, and prospective homeowners who have prepaid the real estate developers[4], are likely to wind up with "negative assets" in the event of a significant fall in the price of real estate. Their wealth will fall, and this may lead to a fall in consumption because of the negative "wealth effect".[5] However, the wealth effect is largely illusory if an individual household only owns its own residence. Regardless of whether the price of an owner-occupied housing unit goes up or down, the utility the owner-occupant derives from owning and occupying the unit remains unchanged—it is the same housing unit. What happens is that the value of the imputed consumption expenditure of the owner-occupant has gone up or down with the net real welfare of the household remaining the same. Thus, the wealth effect for owner-occupants of residential real estate is likely to be small. It may be larger for

[4] One practice that the Chinese Government should consider stopping is the prepayment of purchases of residential housing units to the real estate developer prior to the completion of construction and readiness for occupancy. In the event the real estate developer fails to deliver, or fails to deliver at the committed time, the prepaid purchaser has little recourse. This is especially problematic if the prepaid purchaser has taken out a loan for the purpose. A far better way to proceed is to have the funds for the purchase held in an escrow account at a bank or financial institution. The funds will be released to the real estate developer if the residential housing unit is ready for occupancy at the committed time. The funds will be released back to the prepaid purchaser if the real estate developer fails to deliver at the pre-committed time. However, on the basis of the pre-purchase funds held in the escrow accounts, an experienced real estate developer can still obtain bank credit for the financing of the purchase of the land and the cost of construction.

[5] If consumers feel wealthier, they may consume more and hence increase the aggregate consumption and vice versa.

households that own multiple units for speculative purposes. However, not "pricking" the real estate price bubble now will allow the price bubble to become even bigger and cause even greater financial damages for everyone when it inevitably bursts. For a middle- or low-income owner-occupant, his or her residential housing unit is most likely the most and only valuable asset. These households ought to be given some degree of assistance in weathering the price shock.

The current situation of a high price for residential real estate coupled with high vacancy rates is clearly unsustainable. Trying to prop up the price of residential real estate if it begins to fall now will cause moral hazard—it will convince real estate developers and investors that residential real estate is a one-way bet—that the price will only go up and will never come down. Moreover, if the air is not let out of the bubble at this time, the high price of residential real estate will persist, at least for a while, and may attract even greater additional investment by households, causing the price bubble to be even bigger. Real estate developers will incur additional debt at exorbitant rates of interest to carry their existing loans, and whatever equity they may have will be fairly quickly eroded by the high ongoing interest payments that they have to make. The lending banks and financial institutions will wind up with a larger and larger exposure to real estate developers as they roll over their non-performing loans even if they stop extending new loans to individual households altogether. A bigger financial crisis will ensue when the bubble eventually but inevitably bursts. The sooner the residential real estate problem is tackled, the easier it will be to resolve it. The real estate price bubble must be allowed to burst, but in a controlled way that does not hurt the homeowners too much and does not inflict excessive damage to the banks and financial institutions.

3. The Macroeconomic Implications of "Pricking" the Real Estate Price Bubble

If the real estate price bubble is “pricked”, what would be the effects on the aggregate economy? First of all, the direct effect on the rate of growth of real GDP is actually quite minimal. Just as a rise in the price of real estate per se does not increase real GDP or employment, a fall in the price of real estate also does not, in and of itself, decrease real GDP or employment. There will, however, be a fall in the wealth of the real estate developers and the owners of real estate. The fall in wealth may cause aggregate consumption to fall—this is the so-called wealth effect. The empirical evidence on the size of the wealth effect is sketchy, and it depends critically on the distribution of wealth—the more unequal the distribution of wealth, the smaller the wealth effect. In any case, the wealth effect for a household that owns only the residential unit it occupies is believed to be not large in China.

Of course, if the real estate price bubble bursts, the real estate developers will stop any further development, affecting local GDP and employment negatively, but that is exactly what should be done in light of the huge excess number of housing units in almost all of the cities. The last thing the Chinese central government should do is to encourage real estate developers to develop even more residential housing at this time, except possibly for truly "affordable" housing. In fact, it is probably not a bad idea to tighten up the availability of credit to real estate developers to force the price of real estate to come down to more realistic levels. The Chinese economy cannot afford another round of expansion of real estate development.

Second, the bursting of the real estate price bubble will lead to defaults of loans on the part of some of the real estate developers and the individual residential housing mortgage loan borrowers. The lending banks and financial institutions will find their real estate loans "under-collateralised" and see the values and the ratios of their "non-performing loans" rise. They will need to make greater loss provisions, and either raise more capital or shrink their assets in order to meet capital requirements. However, this is also bound to happen anyway as all bubbles burst eventually. Experience from Hong Kong and Taiwan (for example, during the 1997-1998 East Asian currency crisis) suggests that the default rate can be very low for <u>owner-occupied residential mortgage loans</u>,[6] so it is entirely possible to arrange a workout between the lenders and the individual borrowers through appropriate refinancing. In addition, the "under-collateralised" loans can be sold. Once the balance sheets of the lending banks and financial institutions are cleared, they will actually have spare lending capacity to serve other worthy borrowers such as the small and medium enterprises which have been crowded out by lending on real estate.

[6] The default rate is low because both the lender and the borrower are willing to compromise. The borrower is not that mobile and has to have a place to live anyway. The lender will have to recognise the loss in the case of a loan default and will have difficulty in selling the foreclosed property because of the adverse market conditions. A workout is therefore “win-win” for both sides.

Third, households that own real estate may suffer significant losses, some realised and some unrealised, from the bursting of the bubble. These losses may have an impact on their consumption and investment behaviour. However, the important priority for the central government is to enable those households that are owner-occupants to avoid default and foreclosure, to be able to continue living in their residential units, and to remediate their losses if possible in a fiscally responsible way that does not encourage future moral hazard.

4. A Proposal for the Refinancing of Owner-Occupied Residential Housing Mortgage Loans

The focus of this proposal is on helping the homeowners, especially the owner-occupants,[7] but not the speculators, whose wealth positions may have been damaged by the bursting of the property price bubble. Many of them may wind up with "negative assets", that is, owing more debt on their homes than their market values. By helping the homeowners, however, the lending banks and financial institutions (including also the "Housing Provident Funds (住房公積金)") will also benefit by having fewer "non-performing loans" on their hands.

The fundamental idea is to refinance the mortgage loans of owner-occupied residential housing units with lower fixed interest rates and longer-term mortgage loans to be provided by a government policy bank, thus taking them off the books of the original lending banks and financial institutions. This will help lower the ongoing financial burden of the owner-occupants in general and provide those with "negative assets" a way to reduce the level of the "negative assets". To reduce moral hazard on the part of the lending banks and financial institutions, they will be required to hold 5% of the new loans to maturity and will be responsible for the first 5% of any future loan loss. By the requirement of owner-occupation, each household is entitled to only one such refinancing, even though they may own multiple residential housing units. In addition, the refinancing is subject to limits on the maximum value of the

[7] In order to distinguish between owner-occupants and non-occupying owners, a nationwide real-name system of property ownership registration must be established and strictly enforced.

refinanced loan,[8] as the targeted beneficiaries are the middle- and low-income households.

First, we consider households which do not have "negative assets," so that there is only value impairment of the residential property. The collateral itself is still adequate for the lending bank. A government policy bank such as the China Development Bank can commit to buy qualified owner-occupied residential housing mortgage loans from lending banks and financial institutions refinanced at a lower fixed interest rate, say at 4.5% instead of 6.5% per annum, and a longer maturity, say from 15 years to 35 years. Because of the lower rate and the longer maturity, in present-value terms, the refinancing amounts to a grant or unilateral transfer to the borrower. This will help to cushion the shock of the fall in the price of the real estate to the borrower. In addition, the monthly cash flow of the borrower will be significantly improved by the refinancing, and there may even be more money left over after debt service that can be used for increasing current consumption. From the point of view of the government policy bank, which can borrow at a quasi-sovereign rate of interest, say 4% per annum, it can still have a positive interest rate spread even by buying the refinanced loans. Thus, no direct fiscal subsidy will be required.

Let us consider a concrete example. Suppose an owner-occupied residential housing unit is originally bought at a price of 1,500,000 Yuan, and there is a fully amortised mortgage loan of 1,000,000 Yuan (a 66.67% loan-to-value ratio) against it in place. The original mortgage loan has a fixed rate of interest at 6.5% and a maturity of 15 years, resulting in a level monthly payment of 8,711.07 Yuan. If this loan can be refinanced at a fixed rate of interest at 4.5% and a maturity of 35 years, the level monthly payment will fall to 4,732.57 Yuan, a reduction of the monthly payment (and an increase in the monthly cash flow) for the borrowing household of 3,978.50 Yuan for the first 15 years of ownership of the residential housing unit.[9] On

[8] For example, a market price of, say, no more than 20,000 Yuan per square metre and no more than 100 square metres of total area.

[9] It is true that beginning in the 16th year of ownership, the monthly payment will remain at 4,732.57 Yuan instead of nothing. However, it is reasonable to assume that the borrowing household will have a much higher income and hence be much better able to make the monthly payments 15 years from now. Of course, the borrower can also opt to pay down the new mortgage loan at a faster rate by voluntarily increasing the monthly payments.

a present-value basis, at a discount rate of 7.5%,[10] the refinancing of the original mortgage loan results in a gain of 237,784.69 Yuan to the borrowing household.

Thus, if the price of the housing unit falls by 30%, to 1,050,000 Yuan, the market value of the unit still exceeds the value of the outstanding mortgage loan. The refinancing will be equivalent to a one-time grant to the borrowing household of 237,784.69 Yuan. The net total (unrealised) loss of the household is therefore equal to (1,500,000 - 1,050,000 - 237,784.69) or 212,215.31 Yuan, equivalent to 14.15% of the original purchase price. So, the net loss of the borrowing household can be effectively reduced by more than half through the refinancing programme alone.

For those owner-occupant households with "negative assets", that is, with the amount of mortgage loans still outstanding exceeding the market values of their respective residential housing units, the lenders also have a deficit of collateral. If they foreclose and sell the property on the market, they will incur a loss equal to the deficit of collateral. Thus, any deal that will allow them to reduce the loss should be very much welcome. The proposal is for the original lender to absorb half of the "negative asset" value itself. This is because it made the mistake of granting too large an original loan in the first place and should therefore be required to share in the cost of the resolution of the problem. If it is allowed to escape with no penalty, moral hazard would be encouraged, and it may well repeat the same mistakes all over again in the future. Even with absorbing half of the "negative assets", it is still ahead because it does not have to bear the entire loss which it will have to do otherwise. Moreover, it will be selling these refinanced mortgage loans to the government policy bank, which will be off its books except for the 5% required new loan participation. It will then have a clean balance sheet to pursue other lending.

The borrower will receive a refinanced loan with a reduced principal, lower fixed interest rate and longer maturity. Its financial burden will be reduced. It will actually gain from the refinancing, even though it may still have "negative assets", and its cash flow will improve significantly. It is saved from potential default and will be able to continue living in the same housing unit as before.

[10] It is assumed that the household discount rate is (at least) 7.5% since it is willing to borrow at a rate of interest of 6.5%.

Let us again consider a concrete example. Suppose the market price of the residential unit falls to 750,000 Yuan, a fall of 50%, so that the borrowing household has "negative assets" equal to 250,000 Yuan (with the lending bank having a "collateral deficit" of the same amount). The lending bank will be asked to absorb 50% of the "collateral deficit", or 125,000 Yuan, so that the net mortgage loan outstanding becomes 875,000 Yuan. If this amount is refinanced at a fixed rate of interest of 4.5% and a maturity of 35 years, the level monthly payment will fall to 4,141 Yuan, a reduction of the monthly payment (and an increase in the monthly cash flow) for the borrowing household of 4,570.07 Yuan for the first 15 years of ownership of the residential housing unit. On a present-value basis, at a discount rate of 7.5%, the reduction of the loan principal outstanding and the refinancing of the mortgage loan result in a gain to the borrowing household of 325,523.27 Yuan, which is equivalent to a one-time grant to the borrowing household of the same amount. The net total (unrealised) loss is therefore equal to (1,500,000 - 750,000 - 325,523.27) or 424,476.73 Yuan, equivalent to 28.3% of the original purchase price. So, the loss of the borrowing household is effectively reduced from 750,000 Yuan by 43.4% through the combination of the write-off by the original lending bank and the refinancing. The borrowing household will still have "negative assets" (a loan of 875,000 Yuan versus a market value of 750,000 Yuan), at least for quite a few years until its equity builds up again over time, but it will be able to keep its residential housing unit from foreclosure and its cash flow will improve significantly, enabling it to increase its consumption if it so wishes.

What does the original lending bank have to gain? It can get rid of its "under-collateralised" mortgage loans[11] by selling them to the government policy bank. In addition, it can also make a service fee as the servicing agent of the refinanced loan for the government policy bank without tying up its own capital. Suppose the lending bank receives 20 basis points per year for servicing the refinanced loan, then over the next 35 years, it will have earned 7%, more than the 5% of the refinanced new loan that it is required to hold. In addition, it will also have earned 5% of the total interest paid by the borrower.

[11] Note that even if the market price of a property is exactly equal to the value of the mortgage loan outstanding, the loan is still considered "under-collateralised" because there is no equity compared to the normal requirement of at least 20%.

5. Concurrent Complementary Measures

The real estate price bubble in any given city may burst at any time, triggered by a sudden loss of local confidence. If and when it happens, the government must be prepared to undertake complementary public investment and consumption to take up part of the slack caused by the slowdown in the residential real estate sector, which directly affects the construction sector and the building materials sector. This can be done locally through the building of public infrastructure such as mass transit systems, high-speed railroads, schools, colleges, universities, hospitals, and projects for environmental control, preservation and restoration, depending on the local circumstances. Local public consumption such as education, health care and elderly care services can also be promoted and financed. However, there is no sense in building more high-price residential housing—the only housing that should be built is truly affordable housing.

These public investment and consumption activities are especially important in provinces in which property investment accounts for a large percentage of GDP. For example, in 2013, property investment accounted for 36% of the GDP of Hainan Province, with a per capita GDP of 35,317 Yuan; in the Provinces of Guizhou, which had the lowest per capita GDP in China in 2013 of 22,922 Yuan, and Yunnan, which had the third lowest per capita GDP in 2013 of 25,083 Yuan, property investment accounted for 27% and 25% of their respective GDPs. Something must be done in these provinces to soften the shock of a reduction in residential property investment, especially since they included the poorest provinces in the country.

Equally important is the timely provision of local government finance in the event that the local real estate price bubble bursts. The bursting of the local real estate price bubble signals that the local government can no longer rely on land under its control as a source of revenue. It may even be under additional pressure to meet its debt obligations. Thus, it is important that suitable arrangements be made to fill the gap in local government finance. The most ready and sustainable source is that of a local property tax, which have been introduced on a pilot basis in Guangdong, Chongqing and Shanghai. Of course, direct fiscal subsidy by the central and provincial governments to the locality is possible and welcome if and when the real estate price bubble bursts, but in the medium to long run, implementation of a local property tax is the only sustainable solution to local government finance.

An important idea in our refinancing proposal is to limit the beneficiary households to owner-occupants so as to reduce unnecessary credit subsidies and to discourage future moral hazard on the part of real estate speculators. In order to distinguish between owner-occupied and non-owner-occupied residential property, it is necessary to institute and enforce a "real name" system of property ownership and credit extension, ensuring that no one will be able to take advantage of the refinancing fraudulently or repeatedly. In addition, a national cadastral survey should be carried out, and a national central ownership title registration system should be established for all real estate in China[12]. This would enable the unique identification of each piece of property with its lawfully registered owner. An individual is of course free to own multiple properties, but at any one time he or she can only legitimately claim to be the owner-occupant of a single residential property. A national central ownership title registration system will also prevent the same property from being mortgaged multiple times with different lenders, a fraudulent practice that has been known to occur with some frequency in China. These systems will take time to be established so that they cover the entire country, but they can be put into place one locality at a time, on a pilot basis.

Some of the rules in the residential real estate business should also be reformed. For example, prepaid purchases of residential real estate should be allowed only in the form of escrow accounts established at banks and financial institutions. The real estate developer will have access to the funds in the escrow account only upon completion of construction and issuance of the occupancy permit at the committed time. The prepaid purchaser on his or her part cannot withdraw the funds from the escrow account unless the real estate developer defaults on the timely completion and delivery of the residential property. Such an arrangement should eliminate many of the risks and potential disputes in the buying and selling of real estate. On the basis of the prepaid purchasers' escrow accounts, the banks may be willing to provide construction financing to experienced developers with good delivery track records.

[12] Such a system will record not only the owner but also the mortgage loan lender and other lien holders, and should prevent multiple first mortgage loans from being granted on the same property.

Since the government policy bank can borrow at quasi-sovereign rates of interest, it should be able to issue 35-year fixed-rate bonds at, say, 4% per annum. It will therefore have the funds to purchase the qualified refinanced mortgage loans from the banks and financial institutions, pay for a servicing fee and still have a slight spread to cover its costs and expenses. No fiscal subsidies from the central government should be required. Potential purchasers of these long-term bonds issued by the government policy bank include domestic and foreign national and provincial social security funds, pension funds, endowment funds and life insurance companies.

As the banks and financial institutions sell off their refinanced residential mortgage loans, they will have new lending capacity to finance activities in other sectors, including those that have been crowded out by the borrowers in the residential real estate sector. This should help to increase the supply of credit to small and medium enterprises in China. However, this alone is not sufficient to help solve the problem of financing for small and medium enterprises in China. Other measures such as establishing specialised financial institutions, both private and public, to serve the small and medium enterprises and facilitating private equity investment in small and enterprises are necessary.

The potential bursting of the real estate price bubble may increase defaults on the part of real estate developers and hence of the trust products and wealth management products marketed by the commercial banks to their depositors to provide for the "indirect" loans to the real estate developers. Even failures of some trust companies and smaller banks and financial institutions are possible. Under such a scenario, shadow banking will begin to disappear, which is actually a positive development as far as the overall stability of the Chinese financial system is concerned. As the size and scope of shadow banking shrinks, the commercial banks will return to more conventional lending. That is the right time to begin the process of true interest rate liberalisation. The real spread, between the deposit rate paid by the commercial banks and the loan rate paid by the ultimate borrowers, will actually increase for the commercial banks after eliminating the payments to all the middlemen (trust companies, asset managers, investment banks and securities companies). The higher profits of the commercial banks would also provide room for raising the salaries of their personnel, eliminating the incentive for corrupt banking practices.

6. Concluding Remarks

It is proposed that a pilot programme be established in a small Chinese city with high vacancy rates and "bubbly" residential housing prices. The price of real estate is allowed to adjust to the local market conditions. A standby programme of refinancing will be available to help the middle- and low-income residential property owner-occupants to weather the price decline and help reduce non-performing loans at the local banks and financial institutions. Such a programme will also help to reduce the degree of inequality of the local distribution of income and wealth. It will enable the middle-and low-income households to not only survive the bursting of the real estate price bubble, but also have the additional cash flow to increase their current consumption at the same time.

However, the best time to launch such a pilot programme is either concurrent with or in the immediate aftermath of a significant downward real estate price adjustment, but not before. If such a programme is introduced before the downward price adjustment of the local real estate market, it may actually lead to an even larger real estate price bubble as potential borrowers have increased buying power because of the lower fixed interest rate and longer maturity of the available residential housing mortgage loans.