

The SwapRentSM Transactions for Homeowners, HELM and FARM – A New Alternative Housing Finance System

↳ By Ralph Liu¹

1. Background and Introduction of the SwapRentSM Concept

The history of SwapRentSM can be traced back to an effort to develop a consumer-oriented real estate derivatives business that included an Internet based on-line real estate index futures and options exchange in the US, back in 2001. The purpose was to bring the economic benefits of simplified financial derivatives to consumers who are already, or intend to be, involved in property investment related transactions.

Bearing in mind that conventional financial derivatives, in the way they had been practiced before, had too many potential problems if not managed carefully and they were typically way too complicated for the average consumer, the goal was aimed at inventing something totally new from scratch and developing a fool-proof business methodology so that the new concepts and financial transactions could keep the similar economic benefits for consumers to enjoy but, at the same time, avoid all those potential pitfalls of conventional financial derivatives.

Therefore, the original objectives of the invention of SwapRentSM and its embedded suite of consumer housing financial products were to create a totally new set of consumer financial concepts and products, as well as a new system of fool-proof uses of related financial transactions. The aim was that homeowners and property investors could take advantage of the economic benefits of conventional financial derivative contracts, similar to what stock market investors have been doing for decades, without the complexity, opaqueness and the danger of potential abuses by either the consumers or the financial institution vendors.

The best example in the past of such successful consumer banking products in housing finance

is the prepayment option that was built into a conventional fixed rate long-term mortgage loan offered in the US market. The prepayment option is the choice for borrowers to re-finance for whatever reasons, with the usual main economic reason being that a new lower borrowing rate has become available. This option is, in fact, a form of an interest rate derivative contract (a call option on the interest rate level).

However, banks that offered this economic benefit to homeowners have never marketed it as a derivative contract and consumers have been taking advantage of its economic benefits without any potential dangers or problems for decades. These objectives were exactly what SwapRentSM and its embedded housing finance products such as HELM (Home Equity Locking Mortgage) and FARM (Flexible and Reversible Mortgage) were originally designed to achieve in a similar way.

The research and development breakthrough came in early 2006 and, hence, the birth of the new “economic owning”, “economic renting” and the “temporary own-rent switching” financial concepts. A new type of financial transaction was created to facilitate the temporary own-rent switching concept by homeowners or commercial property owners. The name chosen for it was “a SwapRentSM transaction”.

Therefore, a SwapRentSM transaction has become the realisation of the newly created consumer financial concepts of “economic owning, renting and temporary own-rent switching”, while keeping the existing legal ownership structure for homeowners and other investment property or commercial property owners during the entire contract period.

A conventional legal ownership of a property entitles a property owner the right to occupy and use the property (a usufruct), which we could call the “Shelter Value” (Use Value), as well as

the right to obtain future financial upside appreciation gains and, along with it, the obligation of bearing downside depreciation loss, which we could call the “Economic Value” (Investment Value). A SwapRentSM contract aims to separate the economic value of a conventional property ownership from the shelter value in order to allow the owners to better manage the financial risk and return aspects of a property ownership, while maintaining their shelter value at all times.

A generic SwapRentSM transaction will allow a property owner to efficiently and effectively switch between owning and renting for a part or all of his economic ownership in the property for a finite period of time at any time and at a very low cost. It also allows the owner reversibly to switch back later on if it has become desirable at any time at the same low cost. This could all be done while the property owner keeps the legal title of his property and the right to occupy and use the property at all time. Therefore all the economic benefits of shared appreciation on the upside in exchange of a stream of present cash flow income, or those of downside protection hedging objectives, could be automatically realised when he/she simply does the reversible switch between economically owning and renting for a finite period of time.

From a commercialisation perspective, by focusing on the newly created consumer financial concepts of either full or partial “economic owning, renting and temporary own-rent switching” will make the education and promotion of those inflexible conventional Shared Appreciation Mortgage (SAM) or Shared Equity Mortgage (SEM) concepts and products redundant. Since the new SwapRentSM concept and its embedded mortgage product could deliver the same economic objectives as a much better alternative. It offers many more benefits due to its flexibility, i.e. in that the appreciation component

¹ Ralph Y. Liu is the Founder and Chairman of the Southern California-based Advanced e-Financial Technologies, Inc, <http://www.SwapRent.com>. The Findings, interpretations, statements and conclusions expressed herein are those of the author alone and do not necessarily reflect the views of the International Bank for Reconstruction and

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could be easily detached, traded in a secondary market and be re-attached to any conventional mortgage product again.

Nor will there be any need to educate the consumers and promote the complicated derivatives trading strategies such as selling a covered call option strategy or deciding when and how to buy call options and put options, etc. since a SwapRentSM contract automatically delivers the same economic benefits of these derivative trading strategies by simply letting property owners switch between owning and renting for a period of time.

For consumer-oriented business, sometimes the best way to introduce a new economic concept to consumers may be to introduce something new through something old that they are already very familiar with. Every consumer around the world is already familiar with the difference between owning and renting a real estate property. For example, by being an owner of a real estate property, the owner knows he will be entitled to the future financial appreciation of the property in the future. At the same time he knows he will have to bear the risk of downside depreciation.

By being a renter, the tenant of a real estate property knows that he will not have any benefits of future appreciation or the risk of losing money if property value declines. Therefore similarly, by becoming an "Economic Renter" a consumer will understand that similar to being a conventional renter, by definition, he will not have the benefits of any potential future upside appreciation or the risks of potential future downside depreciation.

For example, if a person chooses to reduce monthly expenses that he/she spends on housing every month, he/she sells his house and becomes a conventional renter for the next five years. He/she gets to pay a lower monthly rental payment than the previously much higher monthly mortgage payment. Five years later if the house has appreciated in value by 20%, he/she will have no right to go back to the new owner and ask for a part of the financial gains. No matter how dumb this person may act for his failure to read the fine print, no laws or liberal politicians would be on his side. The proceeds he received from selling his house five years ago could have had many other better uses, including some investment profits on any other financial assets.

A very important thing to note is that as a new concept and methodology, a SwapRentSM transaction will only function as a tool and add a well-defined time horizon to help property owners realise their investment objectives or to face up the monthly income reality when he/she is forced to make the temporary own-rent switch when he loses his economic monthly income capability. It will not alter the original reasons why people may want to switch or be forced to switch between owning

and renting. People make own-rent switch based on normal economic reasons or personal factors such as monthly income reality, investment views, change of household economic situations, etc.

The SwapRentSM transaction will only facilitate this situation and make the transition easier, since the transaction cost is drastically lowered as compared to the conventional own-rent switching that involves the buying and selling of the conventional legal title ownership in a real estate property. Therefore, the SwapRentSM methodology should not have to bear the burden of the questions why do homeowners or investors want to make certain switching transactions. It is only a more efficient methodology to make the switching more flexible and reversible in a very low cost way.

When a homeowner has already decided at his own will, or is forced to make an own-rent switch when he faces an imminent foreclosure, or when an investor has already made the decision that it is time to for him to invest in real estate, both the homeowner and the investor could save plenty of money and administrative hassles by using the SwapRentSM alternative, as compared to the conventional own-rent switch. The traditional way requires to transfer the legal title of a real estate property in a purchase and sale contract, which usually requires brokerage commissions, title search fee, property taxes, insurance cost and property management expenses to find a renter for the property, etc.

The following chapters of this paper comprise further descriptions and applications of both the transactional mechanics of a SwapRentSM contract and its related consumer housing financial products such as HELM and FARM. Put together, they are meant to outline a generic blueprint to develop an alternative housing finance system and to stimulate readers' further thinking and research on how to customise these new innovations according to local real estate market practices for a potential implementation in various countries around the world.

From the governmental perspective, tightening the credit spigot slightly and introducing non-lending based FARM type of housing finance products to homeowners could stabilise the society without sacrificing any overall homeownership level for its citizens. In fact, FARM may actually help increase it and build the homeownership on a much sounder footing.

For the first time, governments in many countries would be able to perform economic stimulus without resorting to using interest rates only. The new dimension offered by the SwapRentSM contracts will allow governments to increase or decrease the demand for real estate property by simply adjusting the availability of monthly cash flows used for shared economic co-ownership

with property owners as provided by the free market based economic landlord investors.

As shall be fully explained below, while HELM seems to be able to offer timely aids to the current mortgage default problems through the shared appreciation concept, as a new alternative, FARM seems to be much better suited to build stronger foundations for a new housing finance system going forward for our society.

2. How Does A SwapRentSM Contract Work

In the past few years the fictitious housing affordability in the US was created based on transient short-term variable interest rates. When rates were already trending to be higher, the low-income borrowers were still lured into owning real estate properties by the "teaser rates". Those subprime borrowers were originally not qualified as owners. They could, at most, rent to have a shelter to sleep in. They should have been renters to begin with, given that there was no other true affordable housing alternative offered through any effective conventional shared equity or shared appreciation finance product in the US.

The answer to the perennial question of whether to own or to rent varies as time evolves. Sometimes the rental rate is higher (say at 2% of house value per annum) and more expensive than buying (say at a temporary teaser rate of 1%). Other times the reverse is true (say at a 5% mortgage rate when teaser rates expire). It would be optimal if property owners could have a choice by which to separate the legal ownership from the economic interests and hence the financial risks and rewards of owning a property; a way to continue the legal ownership and synthetically switch back and forth between owning and renting only economically and temporarily according to the market conditions and their monthly income reality at the time.

That goal is what the SwapRentSM market was designed to achieve. Homeowners could use them in a SwapRentSM embedded mortgage HELM (Home Equity Locking Mortgage) either with their existing lenders through a loan mod conversion or with any other new lenders that offer them through a refinancing arrangement. Alternatively they could be offered through FARM (Flexible And Reversible Mortgage), which is a new way that allows renters to flexibly and reversibly enjoy partial or full future appreciation of the real estate property that they occupy. If the generic SwapRentSM rate is trading at 2% of the current house value and the current cost of owning as expressed in the mortgage funding cost is at 5% of the current house value in a 5-year SwapRentSM contract example, there will be an annual 3% cost

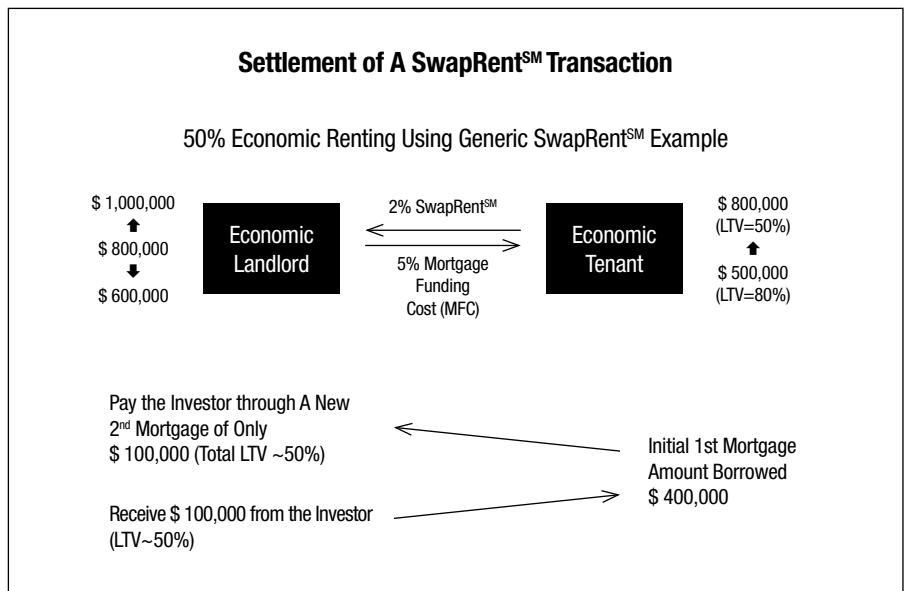
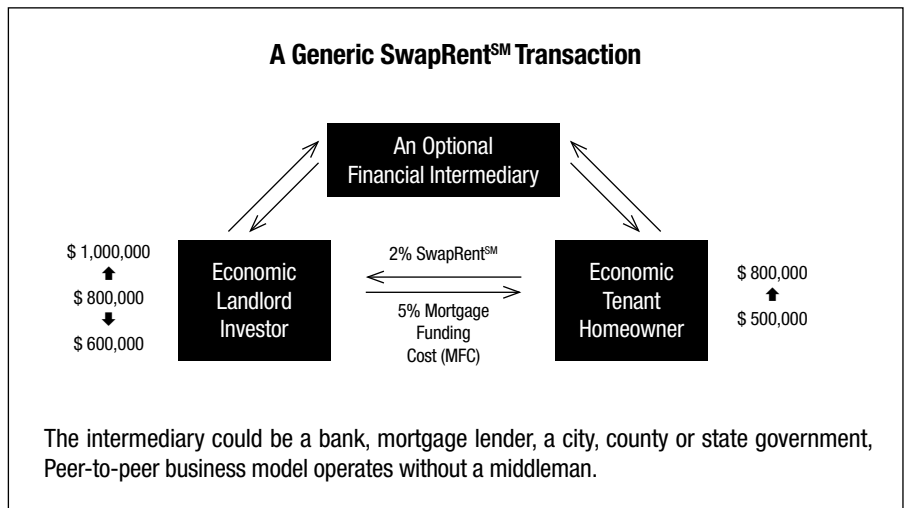
differential between the SwapRentSM payments and the mortgage payments. That means renting would be cheaper than owning at this point in time in this example.

So, if the defaulting subprime borrowers decide to switch back to the more affordable renting only economically for a period of time they would be able to receive 3% annual saving subsidy in monthly payments from the economic landlord investors so that the borrowers could afford to continue to legally keep and stay in their homes. If they were to agree to become economic renters (of their own houses) for a period of time, they would not have any future appreciation benefits or downside depreciation risks during that time period, just like a conventional renter. The investors who act as the "economic landlords" by receiving the SwapRentSM payments and paying out the mortgage funding cost would.

The homeowner or mortgage borrower could switch back to the full economic ownership when the SwapRentSM contract expires or whenever they want to unwind the contract without restrictions before the contract terminates automatically at maturity. This may become desirable for them because they may have more monthly income to acquire more economic ownership later on, because they may decide to move and sell the house or simply because their views on the real estate markets have turned more positive.

The SwapRentSM enabled economic renting could easily be done for only part of the house value, say 25%, 50% or 75% of the current house value instead of the entire 100%. That means that the homeowners could decide to be only partial economic renters for a period of time so that they could get just enough monthly subsidies to afford a home while still enjoy the remaining partial appreciation benefit. The low-income working family, first time homebuyers and the senior citizen community could all benefit further from the flexibility on both the notional amount and the duration of the economic renting period offered by a liquid SwapRentSM trading market for their specific property, neighbourhoods or cities.

Conceptually, SwapRentSM is a new invention which provides an alternative way to both the buying/selling and the renting of a real estate property. The idea is to provide a very simple way in the minds of the property owners, which allows them to protect the gains from their home or commercial property equity value. As long as a property owner has the mental capability to sign a contract to purchase a house or to sign a lease to rent an apartment he or she should have the ability to sign a SwapRentSM contract in order to stay out of the price fluctuation of his/her home or a commercial building that he/she owns for either a short or a prolonged period of time.



The core principle and goal of these new user-friendly consumer financial product innovations is that homeowners or commercial property owners do not need to have advanced knowledge or education in financial derivatives or any other sophisticated institutional capital markets instruments in order to make the SwapRentSM transactions. This goal was specifically set out so that a broader audience of homeowners could really learn, participate and enjoy the new economic benefits. Over time, consumers will develop expertise on using these new instruments from a fresh new consumer perspective without much of the legacy baggage of some of the undesirable practices of conventional financial derivatives developed on other financial assets in the past.

The business idea is to design and create a very simple concept and methodology for property owners to simply "rent" ("SwapRentSM") (to pay a "rent" or to pay a "SwapRentSM" to stay in) their own house for a certain period of time and therefore to achieve the objective of not having a potential future loss or gain in their home equity value during

that same time period, while keeping the existing legal title ownership of the property.

Currently, the only business method available to a property owner in order to lock in the gains or losses in the home equity value is to make a "sale and lease back" transaction. This includes a real property sale transaction and the renting from the new owner of a property that the original property owner had already been occupying. The high transactional cost associated with it, as well as the tax and legal considerations are usually the deterrents for property owners to widely adopt the "sale and lease back" transaction as a temporary tool for the purpose of simply locking in the financial gains or loss for a specified period of time.

Using exchange traded futures and options could be another way to lock in the home equity value but the index-based contracts do not offer a sufficient close relevance to the real fluctuation of the house value of a homeowner. The method involved is also way too complicated for most normal homeowners without advanced

derivatives or market trading knowledge and experience. From the consumers' perspective, a SwapRentSM transaction could, therefore, be viewed as a synthetic version of "sale and lease back" that only captures the economic benefits of a "sale and lease back" without the legal title transfers, triggering of a tax events or the associated high transactional brokerage cost.

As a derivatives instrument, the SwapRentSM could be used with any kind of property price indices or no index at all. For example, the contract could be valued and settled by using property appraisals or the real transaction prices of the property. As could be easily understood, the trading liquidity for a specific property will be very small. When the use of a house price index is selected in a SwapRentSM contract, the trading liquidity will increase with the size the geographical area or number of households that are covered in the particular index. More trading liquidity would attract more investor's interest.

The transaction services between the homeowners and investors could be undertaken directly through a peer-to-peer (P2P) format or via a financial intermediary. Either banks or local governments could be engaged to be the financial intermediaries in between the property owners and investors.

As illustrated below, there are three ways to bring the monthly subsidy from investors to homeowners in return for a part of the future appreciation, P2P (peer-to-peer), B2C (through financial intermediaries such as credit unions, banks, mortgage lenders, etc. or local governments using FARM or HELM to offer services to homeowners) and B2B (trading SwapRentSM contracts between financial institutions or local government housing agencies). The interests and participation from institutional financial intermediaries could greatly help create the critical mass of transaction liquidity necessary

to provide the best pricing for end users that are either homeowners or investors.

3. The Benefits of SwapRentSM Transactions for Homeowners and Property Investors

The new ability of SwapRentSM to separate the economic ownership from the legal ownership has many advantages. For example, the moral hazard and the home improvement issues of the conventional renting could be alleviated through the economic renting concept of a SwapRentSM transaction. To put into an investment professional terms, having the legal ownership will give you the alpha of holding an asset, while switching to economically renting will let you hedge away the beta (the market risks) of owning a specific property.

Therefore, a public housing project with SwapRentSM based economic renting would become a much better neighbourhood than the one with a conventional renting only because people will invest in home improvements freely since they would be the legal owners of the apartment that they live in. However, by being an "economic renter", they will be insulated from the potential fluctuation of the financial value of the real estate markets in general. They will be shielded from the neighbourhood's appreciation/depreciation potential represented by a neighbourhood or city property price index in exchange for receiving the monthly subsidy that represents the own-rent cost saving by being an "economic renter".

Whatever home improvement investment they have already made to the properties they will be able to recoup those investments when they actually sell the properties on legal terms later on. The development of this new economic con-

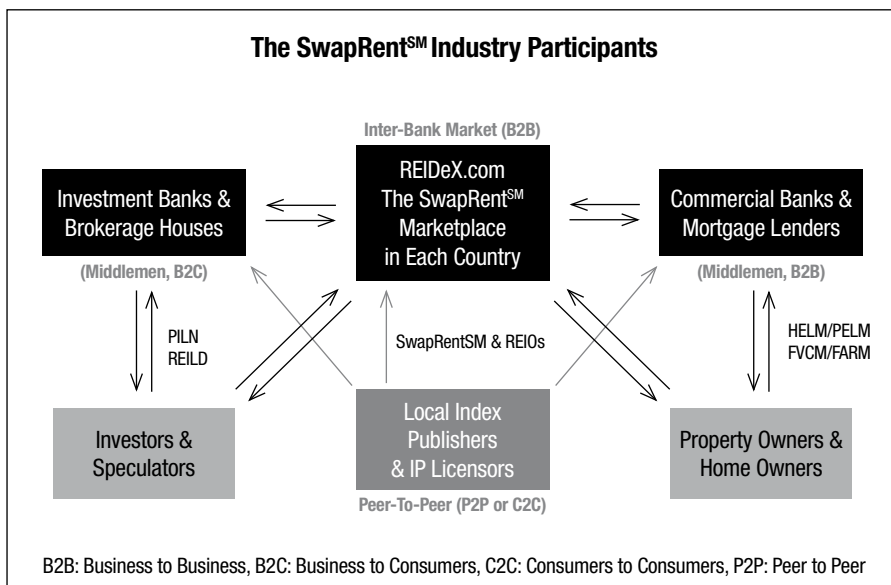
cept would have great implications for urban planning and public housing policy for city and county local governments in the future.

Upscale neighbourhoods may not have a conventional affordable housing complex or even the conventional apartment rental units. While more affluent people may enjoy the full ownership (both full legal title ownership and full economic ownership, i.e. with the entire upside financial appreciation potential) of the houses because of their high monthly income earning power, low income families could also choose to become legitimate residents with equal civil rights in the same neighbourhood if they are willing to forgo the financial aspects of the potential future appreciation or depreciation, i.e. the economic value, of their homes.

While upon a first thought, acquiring the future appreciation potential of properties could be a desirable thing to have, it does come with a cost and the cost of this investment could be totally wasted as we have seen in recent years if the value of real estate property declines instead, let alone the risk of bearing further financial losses that usually come with economic ownership when the property market actually collapses. Houses may appreciate in value slowly through time under most usually competent governments but we cannot always count on governments to do the right things to foster gradual growth of property markets. Therefore, the inability of low-income people to participate in the boom and bust cycles of the property investment market may not necessarily be a bad thing after all.

Through SwapRentSM contracts, these low-income families could simply continue to enjoy the comfort and the security of their homes by having the legal title ownership and becoming the "economic renters" of their own homes, irrespective what may happen to the financial value of the property markets in the future. An investment in a home ownership could finally become a true long-term shelter and be removed from the financial ups and downs similar to that of a casino game.

The main implications of this are that first, cities may not need to waste taxpayer's money to build that many low-income housing complexes with substandard building materials anymore, which often end up slums and fostering class distinctions and prejudice in our societies. Second, low-income people would no longer be forced, duped, coerced or, in some other occasions, be allowed to wilfully borrow and try to own something they could not afford in the first place (i.e. the combined cost of both legal title ownership and future appreciation potential as expressed in economic ownership) based on their current and foreseeable future monthly earning power.



After this new housing finance methodology has been adopted, the abuse of irresponsible borrowing/lending and over-leveraging with a hope to get rich quickly, which has caused our current default-led global financial crisis will have much less chance to be repeated on a massive scale again. People will learn that success in life may have to be earned in an old fashioned way through hard work instead of hoping to gamble with borrowed money. The practice of the simple economic concept of shared appreciation or shared ownership will indeed automatically discourage the abuse of over-stretched borrowing in our economic societies. SwapRentSM and its secondary marketplace, REIDeX² could be the right solutions as the newly invented business method and marketplace to make that simple economic concept a reality in the most effective and efficient way.

To summarise, among many other applications, the five key economic advantages of the SwapRentSM contract and its related consumer housing finance products are:

1. For those informed and educated homeowners, to hedge the financial value of the properties that they own by switching between owning and renting economically only based on their views on what the overall real estate market will do in the near future while keeping the legal title ownership of all their properties at all time.
2. Considering the relative cost of owning and renting, the less affluent homeowners could decide to be economic renters or owners solely based on their monthly income reality and how much monthly subsidy they could receive to afford legally owning the properties while being partial or entire economic renters for a period of time. This will increase the housing affordability for young first-time would-be homeowners, low-income working families and retired senior citizens. For senior citizens, it also offers a much better alternative to the ineffective, inefficient and expensive reverse mortgage product for the seniors.
3. Due to the alleviation of moral hazard associated with conventional renting, SwapRentSM will improve the neighbourhood quality of both the public housing projects and the conventional apartment rental complexes. It could, thus, reduce crimes and improve the overall well being of the urban environment anywhere in the world. In addition, with this newly created portable housing affordability, municipalities would no longer have to waste taxpayers' money in building low quality affordable housing complexes that often turn into slums.
4. For both institutional and individual investors to become synthetic "economic landlords" by simply receiving SwapRentSM payments and paying out mortgage funding cost for a particular neighbourhood or city for a period of time. They could establish such cross border reversible long property exposures easily all over the world without having to worry about the management of these properties and incurring the normally high transactional costs and taxes.
5. For current apartment or house renters to establish an "anticipatory hedge" position through receiving SwapRentSM payments based on a particular city level property price index so that they can lock in today's real estate price levels for intended purchases of real estate properties in that city in the future. They would not be priced out of the market if indeed real estate prices rise sharply in the future since they would have locked in the cost level through the SwapRentSM contract.

4. The Pricing Methodology of a SwapRentSM Contract

From the investors' perspective, they will be paying the annual 3% subsidy to the homeowners every year in exchange to obtain the upside appreciation potential and incurring the downside depreciation risk at the same time. In the example given above, the value used for a Generic SwapRentSM rate (GSR) for a sample neighbourhood is 2%, with the mortgage funding cost (MFC) being 5% as a starting example. Both rates will change, driven by the forces of supply and demand in their respective trading markets. If the GSR trades up to 3% by supply and demand factors and the MFC remain unchanged at 5%, then the annual subsidy will become only 2% per annum, for example.

So the investment decision for an investor could be very simple. Using an annual 3% subsidy outlay for the investor as in the existing example, the cost for a five-year SwapRentSM contract is 15% (without considering compounding effect for illustration simplicity), which is the approximate total cumulative subsidy for five years. If he thinks the potential appreciation of the underlying property (or the underlying property price index if an index is used by choice) will be higher, then it could be a good investment for him. For the 10-year SwapRentSM contract, he can compare the potential expected appreciation and the cost of 10-year subsidy outlay of approximately 30% etc.

Although SwapRentSM was never intended as a bailout tool, its ability to offer true housing

affordability co-incidentally makes it convenient to help the distressed homeowners to avoid foreclosures as one of its potential applications. However, when it comes to rescuing distressed homeowners, the SwapRentSM approach is based on true free market principles to the current economic problems. No charity or give-away assistance using taxpayers' money that causes moral hazards would be necessary. The monthly subsidy amounts would have to be derived from the true market rates as they are freely traded in an uninhibited marketplace.

The numerical examples below show what some sample SwapRentSM rates for a local city might look like. The level of these rates should be best decided by the pure supply-and-demand forces of the free market participants that are primarily composed of homeowners, investors and their intermediaries.

As of Friday, October 12, 2007, given the then negative sentiment for the near-term outlook on US residential real estate, the SwapRentSM market rate levels (mid-point between bid and offer rates) for the MSA (Metropolitan Statistical Area) of Los Angeles could look like the following. The arbitrarily suggested example scenarios are for illustration purposes only:

1Y	2Y	3Y	4Y	5Y	...	10Y	15Y	20Y
15%	10%	5%	3%	2%	...	1%	0%	-2%

If the Mortgage Funding Cost (MFC) remains the same at 5% for all maturities, it means the annual subsidies from the "economic landlord" investors to the "economic tenant" homeowners (i.e. the MFC minus the GSR) are as follows: (the annual subsidy rate = the MFC rate - the SwapRentSM rate)

-10%	-5%	0%	2%	3%	...	4%	5%	7%
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The simplified break-even points for the investors of cumulative general US residential real estate market appreciation (negative sign means depreciation) represented by the MSA level property index are when the returns of these indices will have to go up by the following amount that represent cumulative subsidy outlays (multiplying the number of years to the annual subsidy rates, without considering compounding and the time value of money for illustration simplicity):

-10%	-10%	0%	8%	15%	...	40%	75%	140%
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Since SwapRentSM rates capture more than the information of the current physical rental rates in a given neighbourhood or city in the real world and it also reflects the market expectation of the

² The REIDeX name originally came from the abbreviation of "Real Estate Index Derivatives Exchange".

expected return from the price changes during the holding period, the very high Generic SwapRentSM rates for the shorter maturity contracts indicate the extreme bearishness in the US residential real estate market at this moment in time.

As long as the drop in prices at the end of the contract period, as represented by the local MSA index, does not go below 10% for a one-year contract the investors would be interested. The same is true for the cumulated returns for a two-year contract. The flat annual subsidy and expected return for a three-year contract simply indicates that people may think the market could recover to where we are at today in three years' time. Starting from a four-year contract there will be positive annual subsidies for the homeowners, similarly for all the longer-term maturity contracts.

As could be seen by these simplified examples, the supply and demand forces as well as the general market expectation will drive where the Generic SwapRentSM rates could be traded in a given local market although they will also be bound by any risk-less arbitrage opportunities that might exist.

It also illustrates that, in the current environment, if the homeowners want annual subsidies such as in the case of the defaulting subprime borrowers whose ARM rates had been reset higher may need to commit to longer terms contracts, say four or five years and longer in order to attract proper investors' interests. The homeowners could always unwind their SwapRentSM positions that were built in their SwapRentSM embedded mortgages after one or two years for the remaining maturities if it becomes desirable at that time. However, they would need to understand that the market levels and the general real estate market sentiments may have already changed by then. Unwinding a remaining position could generate unexpected mark-to-market losses or gains.

These examples only serve as a concept illustration of how the trading mechanics of the Generic SwapRentSM rates could be like under the then (October 12, 2007) bearish market outlook for the US residential real estate market. It could change drastically when the market sentiment changes, just like how market rates or prices behave in any other financial markets. The point is that if the SwapRentSM markets had been implemented and had become a widely accepted practice soon enough, a general US real estate market recession could well have been avoided.

It could easily be understood why that would have been the case since, if those existing lending banks had started offering these five-year or 10-year SwapRentSM contracts soon enough to the defaulting homeowners, those borrowers would not have had to default and be foreclosed. Massive foreclosures could have been avoided or, at least, be postponed for another five years, 10 years or even

longer. So there would not have been massive selling pressure in the property market and of course the residential real estate market would have been able to hang on without a major collapse.

5. Simple Potential SwapRentSM Application Examples

Although the settlement of a SwapRentSM contract could be done with a property price index, a property appraisal method or the real transaction price, let's use a simple application example of an index-based SwapRentSM contract to illustrate the basic economic benefits of a SwapRentSM contract.

A homeowner who lives in Los Angeles may decide to be the "economic tenant" of his own home in Los Angeles by paying SwapRentSM rate (at say 1.5% of the house value per annum) based on the Los Angeles metropolitan area index to an investor who is willing to be his/her "economic landlord" investor for a contract maturity of 10 years and, simultaneously, receiving an annual mortgage funding cost (MFC) rate of say 5% from this investor for the duration of the SwapRentSM contract.

It would be a great way for investors to invest as an "economic landlord" since he would only have to pay 3.5% of the house value to enjoy the entire upside appreciation potential (and bear the downside depreciation risk), just like a conventional investor except that he would get to avoid all the transactional costs involved such as brokerage fees, property taxes, insurance cost and the expenses to hire a management company to find and manage a renter, ... etc.

Once this contract is executed, during this 10-year contract period, the homeowner would have locked in the current price level of his own home and would not have any future appreciation potential or any downside depreciation worries anymore. The homeowner could decide to unwind and terminate this SwapRentSM transaction any time (e.g. six months, one year or two years later) before maturity due to relocation, new jobs with higher monthly income, investment timing views (i.e. cutting loss, taking profit, being bullish about the LA property market again) or any other reasons based on pure free will.

The reason why this decision is to be made could be based on either a hedging purpose, an equity withdrawal or appreciation give-up cash-out purpose since in this contract he would receive a netted monthly payment from the investor, both as explained above, or even simply a pure life style change purpose.

For example, this person may be retiring in 10 years and may decide to relocate to Hawaii for his retirement. He could then enter into another SwapRentSM contract of similar remaining maturity based on the Honolulu metropolitan area

index with another counter-party homeowner in Honolulu by receiving a SwapRentSM rate (at say 2.5% per annum) and simultaneously paying an annual MFC of say 5.5% so that he could become an "economic landlord" himself in Honolulu. By doing so he would be able to move to Honolulu 10 years later to look for an ideal dream house in that city and purchase the chosen house then at a price level (say per sq ft price) that was locked in 10 years earlier through the SwapRentSM contract.

Both of these two separate SwapRentSM contracts could be unwound and terminated earlier before or on the final maturity dates, either together or separately, at some freely traded secondary markets such as REIDeX, the SwapRentSM marketplace. Of course they would have to be unwound at the then market rates to reflect a profit or loss, just like how any other financial instruments operate in their own markets.

In the foreseeable future, homeowners might be able to apply this on an international scale. For example, a homeowner in London could decide to make a retirement life style change plan through SwapRentSM contracts so that he/she could retire to Nice in the south of France. Homeowners could easily do the same between Tokyo and Singapore, between Beijing and Taipei or even between Dubai and Kuala Lumpur.

The decisions could also be financial and investment view driven. A resident family in Toronto may think that the future real estate property appreciation potential in Australian metropolitan area could be higher for the next five years than Canadian metropolitan area. She/he could then make arrangement through city index based SwapRentSM contracts and be a 80% "economic tenant" in his/her own house in Toronto and be a 40% "economic landlord" investor in both Sydney and Melbourne.

Financially speaking, with very little hassle and transactional cost, he/she would then have a diversified investment exposure composed of 20% Toronto, 40% Sydney and 40% Melbourne in his/her medium-term investment portfolio on the residential real estate markets. Socially speaking, he/she and their children will continue to enjoy the comfort of occupying 100% of their own house and the associated neighbourhoods in Toronto for the next five years and more.

From the providers' delivery perspective, on the Canadian side, in addition to the usual banks or other financial institutions, the Ontario Provincial Government or Toronto Municipal Government could also channel the net positive monthly subsidies from an "economic landlord" investor whom it has a separate SwapRentSM contract with to this Toronto homeowner. The Toronto homeowner could then use part of these net monthly proceeds he/she

has received from the local government to become the “economic landlord citizen” in Australia.

On the Australian side, again in addition to the usual banks and other financial institutions, the State Governments of New South Wales and Victoria, their housing agencies, or the Municipal Governments of Sydney and Melbourne could also administer these SwapRentSM programs for their local residents. Among many other sources, they could even have a SwapRentSM contract with this Toronto homeowner directly to treat him/her as an “economic virtual citizen” of their cities and channel these net positive monthly subsidies to many other homeowners in their own cities who may be in need of these monthly subsidies through another SwapRentSM contract or an embedded HELM contract, thus creating housing affordability for their own local low-income citizens.

For better managing the homeowner counterparty credit issues, the best way would be for the municipal or state/territory and provincial governments at different geographical locations to communicate with one another for managing the credit risks of both “economic tenant” homeowners and “economic landlord” investors in their cities, states or provinces in order to make sure only ethically responsible and economically eligible law-abiding citizens get the chance to participate in these reciprocal programs.

These new social innovations derived from the cross-city and cross-border aspects of the SwapRentSM business provide certain privileges to people who behave in a morally decent way in our societies. Local governments’ active participation and proper regulations could ensure that this would remain the case.

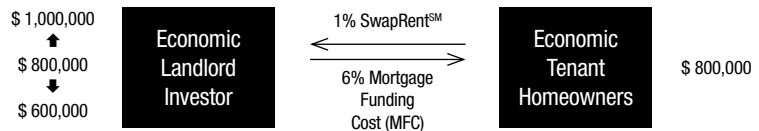
In this way, the Australian state/territory or municipal governments could simply accomplish their goals of providing housing affordability to their local low-income families or other homeowners in need without having to resort to any of their own local taxpayer’s money since the money will be provided from private free market sources that may include both foreign or domestic institutional investors and the individual “economic virtual citizens” of their municipalities.

In addition, by being the middlemen to administer these SwapRentSM programs, the local governments could generate a reasonable fee to enhance the local governments’ own finances for offering these services to their local real citizens and many virtual citizens around the world so that they could reduce the local property and other tax burdens to their own local residents.

Wouldn’t this be a better free market based alternative addition to offer housing affordability that could discourage the abuse of irresponsible borrowing/lending in the various national housing finance systems for the future of our capitalism society?

Sample Business Model for the Financial Intermediaries

50% Economic Renting Using AG SwapRentSM Shared Appreciation Example



As an example, if the total annual spread that the financial intermediary will get is 4.9% (after 0.1% SwapRentSM transaction service fee to REIDeX), it could keep say, 0.2% to 0.5% if it is a not-for-profit entity or 0.5% to 2.0% depending on the homeowner’s credit score, history, LTV lien seniority, ... ect., as its revenue sources for a for-profit operation.

The net spread that the homeowners will get after the intermediary’s fee is 4.4% to 2.9% depending on each of the individual situations.

6. Using SwapRentSM as an Economic Policy Management Tool

The SwapRentSM transaction could be used as an immediate solution to the current legacy mortgage assets held by the US GSEs (Government Sponsored Enterprises) such as Fannie Mae, Freddie Mac as well as those held by the Fed itself, Ginnie Mae and all other financial institutions under the TARP program.

Since the SwapRentSM solution is not based on a further lending concept but rather a co-ownership type of equity financing, it does not have to rely on a low interest rate environment for it to be effective. In fact, it offers a totally new dimension on its own to the property market dynamics. Therefore its implementation could also free up the Federal Reserve Board to manage interest rate levels in a much more independent way. Furthermore, the policy makers could also consider influencing SwapRentSM rates for different contract maturity as a new economic stimulus policy tool going forward in order to adjust the real estate property value or home equity levels as a major source of our national wealth that could further stimulate or restrain the economic activities in local communities which represent the foundation of the national economy.

Due to the fact that the SwapRentSM solution is similar in concept to a debt-for-equity swap so that homeowners could hold on to their homes and mortgage investors could avoid financial losses. The most direct consequences of implementing this new non-lending, co-ownership based housing finance system are that homeowners will be able to de-leverage through this new realisation of the debt-for-equity swap concept, GSEs such as Fannie and Freddie could de-leverage because the mortgage assets would

get to be fixed up and sold to other free market investors, and the nation could de-leverage because taxpayer’s money would no longer be tied up to rescue all these troubled financial institutions. Nothing is more effective than tackling the problem right at its roots, i.e. to help homeowners avoid foreclosures and design new ways to increase home equity value without inappropriate borrowing.

In order to understand why a liquid SwapRentSM rates market could help the nation’s policy makers with a new policy tool to manage the national economy, let’s make a quick review on how a SwapRentSM contract technically operates again. What a SwapRentSM contract does is to allow both existing and would-be property owners to switch between owning and renting economically back and forth with very low transaction costs at any time they want for a specified period of time for whatever reasons they may have. Therefore the pricing of a SwapRentSM contract relies on the cost differential between the cost to own a property (say 5% of the current house value per annum) and the cost to rent a property (say 2% of the current house value per annum) for an intended period of time.

Using the same numerical example of a \$800,000 house in southern California as used before, the annual 3% (difference between 5% to own and 2% to rent) own-rent cost differential will translate into \$2,000 per month for a 100% “temporary own-rent switching” or “economic renting” for a period of time, say five years. That is where the quantified monthly subsidy would come from. Whoever wants to own the future appreciation in five years’ time similar to a convention owner will pay the monthly subsidy to the current property legal owner.

For a 50% “temporary own-rent switching”, the monthly subsidy will be only half of that, i.e. \$1,000 per month. Therefore, the current property legal title owner could still enjoy the remaining 50% appreciation potential; hence the conventional understanding of the “shared appreciation” concept could be more flexibly and reversibly realized by a SwapRentSM contract. The cost to own in the Western financial system such as the US is simply to current interest rate level derived from the interest rate term structure. The best proxy for the cost to own in the US is the corresponding Interest Rate Swaps (IRS) rate level published by the Federal Reserve Board at its web site every day.

The corresponding maturity SwapRentSM rate level would be determined from trading activities by free market participants at REIDeX or the interbank markets. The Federal Reserve Board could go through GSE such as Fannie Mae, Freddie Mac or even government owned Ginnae Mae and let them act as one of the free market participants to assume the role of the “economic landlord investors” themselves first to provide the monthly subsidy to homeowners. They could alter the supply and demand factors through being either more or less aggressive in bidding for the SwapRentSM rates in this freely traded marketplace, not unlike how the Fed currently conducts its interest rate policy through the short term repo markets with the banks.

Using the same five-year contract as the example, if the Government wants to stimulate the local economy at grassroots level it could be more aggressive in granting monthly subsidy through being willing to accept a lower SwapRentSM rate of 1.5% or 1% (instead of the previous starting point of 2% in the example). Therefore the monthly subsidy the homeowners receive would be equivalent to a higher annual 3.5% or 4% of the current house value instead when the homeowner decides to enter into a SwapRentSM transaction with the GSE. Remember that the annual subsidy numbers are simply the difference between the cost to own, i.e. IRS rate of 5% and the SwapRentSM rates.

Given an interest rate level fixed at 5% for a certain contract maturity, say five years, the more aggressive (i.e. the more generous) the Government is willing to offer the monthly subsidy amount to homeowners in the form of a lower SwapRentSM rate it is willing to receive, the more likely more property owners in the community will take up the offer as a free market choice.

The more people that have signed up, the more it would create buying demand the more likely there is a perception that the local properties will indeed appreciate in the future and the local economy will indeed strengthen, the more likely the SwapRentSM contracts that capture the finan-

cial value of partial future appreciation of these underlying properties will then increase in value and, therefore, the more likely the GSEs could sell them at a higher price to other free market investors in order for the GSEs to regenerate the capital to provide more assistance to other American homeowners to own homes.

It is indeed a self-fulfilling prophecy that may let expectation evolve into reality, quite similar to what adjusting the interest rate levels by the Fed. could do to the investment psychology and perhaps reality of our future national economy. From a local property owner's perspective, a 100% ownership of future appreciation potential in five year's time will mean zero financial gains when there is no appreciation at all. There could even be further losses when the property value further depreciates. Sharing and maintaining a remaining 50% appreciation potential in order to help stop foreclosure selling and increase overall buying demand in the local community may still entitle the property owner a 10% gain when there is an overall 20% rise on the value of the specific property or on a house price index. In short, 100% of zero is still zero but 50% of a 20% appreciation will be a 10% gain to enjoy at the end of the time horizon. Not a bad deal when you are also getting paid handsomely every month to wait for that to happen.

The homeowners could do the SwapRentSM transaction with GSE directly or the GSEs could decide to engage a fee-earning local financial intermediary, housing agency of a local governments etc. in order to better administer and better monitor the on-going credit risks.

As explained before, the GSE or financial intermediary could also better manage the transactions through converting the homeowner's existing mortgages into a SwapRentSM imbedded HELM (Home Equity Locking Mortgage). A HELM could simply be a wrap-around package of the existing first mortgage and a contingent second mortgage that settles the payoff of the SwapRentSM contract at contract maturity date automatically, as the new unpaid balance of HELM at that time, in order to accomplish all the desired economic outcomes with very little or no cost and administrative hassles to the homeowners.

After offering that new HELM to the homeowners either directly or through local financial intermediaries, the GSE itself could then use another new offsetting SwapRentSM to cancel out the exposure of the embedded SwapRentSM contract in the HELM in order to lay off their property value risks and appreciation potentials (similar to an equity co-ownership piece) with other free market based investors through the inter-bank market or REIDeX. These ultimate investors of these co-ownership SwapRentSM contracts could be state and local pension funds, hedge funds, insurance

companies, foreign sovereign wealth funds or in short, any free market participants.

Many state, county and city pension funds could benefit directly by acting as the ultimate “economic landlord” investors to provide the needed monthly cash flows to homeowners for a fair share of the future appreciation potential of the property in return. A successful implementation will not only help many state/county/city treasuries and the state employees' pension funds with higher returns, but also it may help stabilise or boost the local property value and, hence, the entire State's economic prosperity. At the same time, the programme will get to accomplish its goal of maintaining social stability through helping the distressed homeowners in their state hang on to their homes very effectively without having to spend any taxpayer's money for preferential bailout treatments that cause moral hazard and make things worse.

In a sense, as a temporary conduit, GSEs will finally be able to provide funding for American homeownership not just in the form of debt, but also through a new additional form of a non-lending based economic version of tradable home equity co-ownership. The new alternative system could greatly lower the chance of a repeat of the previous subprime mortgage lending abuse fiasco in a purely lending based housing finance system that may often create boom-and-bust cycles and hence social instability.

Next, let's take a look at how policy makers could influence SwapRentSM rates traded in the free marketplace in order to use it to stimulate or restrain economic activities in the local communities throughout the country.

In order for the SwapRentSM market to work as a policy tool the politicians will have to break out of their socialist mentality and treat the new SwapRentSM programme as a 100% free market operation, i.e. let the local property speculators and entrepreneurs participate freely. Make the SwapRentSM transactions and the monthly subsidy available to anyone who wants it as long as they have a property to be able to share a part of the future upside appreciation with another investor, not just whoever needs a subsidy for survival purpose.

There should not be any restrictions other than the credit quality, moral, ethical or legal eligibility to participate. Entrepreneurs who are willing to trade off some of the future appreciation potential of the properties they own in order to receive current monthly cash flows so that they could use it to start a new business or to hire more people represent a major target users profile that this policy oriented SwapRentSM program is intended to accomplish with.

There are currently many other ineffective bailout plans that create moral hazards by giving preferential treatments to distressed homeowners already in place. That is actually a good thing since these necessary perceived politicians' obligations may be finally done and over with. Now the policy makers could put the free enterprise based SwapRentSM programme in conjunction with, or on top of, those ineffective bailout plans to really get the necessary work done in order to be able to create wealth for the nation again.

So as explained above, when the five-year IRS rate is at 5%, if the policy makers want to provide stimulus to the local economy they could bid for the five-year SwapRentSM rate at 1.5%, 1% or even lower so that the monthly subsidy to property owners is larger (3.5% or 4% of the property value per annum). If they want to cool the heated economy down they could bid for it at 2.5%, 3% or even higher so that the monthly subsidy to property owners is smaller (2.5% or 2% of the property value per annum).

The most important intended concept to illustrate here is that all these could be done irrespective where the current interest rate levels are or will be at in the future. So that when the cost to own or the five-year IRS rate moves up to 8%, the SwapRentSM rates would simply move up in tandem and be trading at 4.5% or 4% for a stimulus policy (the same larger subsidy of 3.5% or 4% of the property value per annum) or be trading at 5.5% or 6% for a cooling policy (the same smaller subsidy 2.5% or 2% of the property value per annum).

When the five-year IRS rate moves down to 2%, the SwapRentSM rates would simply move down in tandem and be trading at -1.5% or -2% for a stimulus policy (the same larger subsidy 3.5%

or 4% of the property value per annum) or be trading at -0.5% or 0% for a cooling policy (the same smaller subsidy of 2.5% or 2% of the property value per annum).

The main point is that the monetary policy of where the interest levels are will no longer be the main driving force of the property value any more. The property value in the US could be determined in part by the SwapRentSM rates for local communities that the policy makers could use as an alternative tool to adjust. That is what it means for SwapRentSM transactions to offer a new dimension in the economic policy tools for the policy makers. It would not just be the previous (and only) two tools of using monetary policy on interest rates or using fiscal policy on tapping taxpayer's money anymore.

The obvious advantage of this added power in the new policy strategy is that the federal government could impose to avoid blowing up asset bubbles again in many other asset classes or risking causing higher inflation further down the road by artificially keeping interest rates low. The Federal Reserve could therefore, freely increase the short term discount rates or Fed. fund rates to curb bubbles from happening in the stock markets, the precious metals markets and the commodity markets in order to avoid a possible run-away hyper-inflation. The high interest rates will no longer hurt the property value or be the sole force to negatively impact the economy anymore as the property value and job creations at the local communities throughout the country could be accomplished separately through a very generous co-ownership monthly subsidy offered through influencing lower SwapRentSM rates in the marketplace by the GSEs. The Fed could finally be freed up to make these monetary

decisions on a much more independent basis to focus on fighting potential inflation.

Through influencing the SwapRentSM rates separately, it is likely that we may have a double digits long-term interest rates to fight inflation and still have a strong property market and a robust economy as the local home value could finally be properly detached partially from the Fed's short term monetary policies. This is exactly the third dimension as a policy tool that the new SwapRentSM based non-lending or co-ownership housing finance system could provide as a part of its many advantages.

The beauty of this new SwapRentSM housing finance system is that capitalism will also be able to best manifest its value and become more politically popular with the mass population as the profit driven motives will allow the Main Street local property investors, speculators and business entrepreneurs at the local community grassroots level, instead of always having to rely on the fat cats on Wall Street as in the past in a primarily securitisation based housing finance system, to all participate and to become the locomotive engine to help create wealth for our nation.

Adding this new alternative SwapRentSM housing finance system would only make everybody happier since not only does it makes economic sense but also political sense, due to its inherently more democratic wealth sharing capability. By helping create wealth at the grassroots level of the local community first and driving the country's economic recovery and growth, this would certainly help de-polarize the current imbalance and the tension between Wall Street and Main Street.