



## Council on Federal Financial Relations Affordable Housing Working Group

Submission by  
Grace Mutual Limited

This submission was prepared by Grace Mutual Limited, with the support of Allen Partners and National Australia Bank.

It was specifically designed to meet the needs of institutional investors, and the proposal detail was shaped in numerous conversations and meetings with the investment teams at superannuation funds and major fixed interest investors, both domestic and international.

This submission is in 2 parts:

1. A response to the Affordable Housing Working Group Issues Paper
2. The Housing Bank submission to the Working Group

## **1. Response to the Issues Paper**

### **Introduction**

*The Working Group will focus primarily on improving the supply of affordable housing, through the introduction of innovative, transformative and implementable financing models. These models will focus on the social housing sector, and the private rental market, and be targeted at low-income households.*

The Housing Bank proposal addresses the provision of large-scale institutional finance for use in increasing the supply of affordable private rental housing, thereby representing a supply side initiative. It does not address the funding of social housing.

The problem of affordable housing requires a Government intervention, as the market will not otherwise voluntarily forego profit to enable reduced rent. However, the problem is too large for Government, and private sector capital is required. The challenge is therefore: What is the smallest amount of Government incentive needed to attract the largest amount of private sector capital? What will it take to “prime the pump”?

The Housing Bank proposal addresses this challenge. It is scalable, replicable and immediately do-able. It is an industry solution and is self-funding, requiring no further Government expenditure beyond the incentive payments.

The Housing Bank financing mechanism uses an established market mechanism (bond syndication), and a form of instrument (rated, fixed interest bonds) found in most normal superfund investment portfolios.

The Housing Bank proposal represents the first institutional-scale social impact investment, and brings superfund investment into affordable housing for the first time in Australia.

It is contestable at the investor level (bidding for bonds), at the lending level (CHPs bid for loans) and at the intermediary level (banks bid to manage issuance).

This introduction largely follows the format and order of the Issues Paper, without repeating the statistics and re-framing the problem.

### **Involvement of Critical Sectors**

The Housing Bank proposal has been designed around the needs of two critical sectors, ensuring their involvement:

#### **1. Community Housing Providers (CHPs)**

CHPs have become the sector of choice for State Governments to deliver tenant services and manage affordable housing. Delivering new initiatives through CHPs will continue their strong growth in financial strength and capability. They also bring tax advantages. We consider their involvement critical in any housing solution.

Their greatest need is long term, stable, low cost capital. This will enable them to develop homes at scale, and provide accommodation at sub-market rates.

2. Australian Corporate and Retail Superannuation Funds (Superfunds)

Involvement of Superfunds is critical to maximizing the leverage on any Government contribution. They bring large pools of capital, and are the lowest cost source after Government.

The Housing Bank proposal was developed directly with them, not through academic endeavor or studies of foreign practice. It also comes from 4 years of working with NRAS and experiencing the challenges for institutional investors.

The following design features (each incorporated into the Housing Bank) are necessary to attract Superfund investment:

- Initiatives must use familiar mechanisms or standard practices;
- Initiatives must enable liquidity, even if the term is long;
- Initiatives must provide a return commensurate with the perceived risk; and
- Initiatives must be sufficiently large to warrant the effort and cost of assessment.

Other features which impact perceived risk, include:

- Predictability
  - Financial instruments cannot be dependent on maintenance of social policy, but rather be based on legal contractual obligations; and
  - Financial programs should have continuity, enabling a known future pipeline of investment, which can be planned in advance.
- Dedicated intermediary
  - A single source of information and transactions, builds familiarity on both sides, and will assist the Housing Bank to have a sector borrowing function after the Government intervention expires.
- Governance
  - Experienced and quality board and management participants.

**Broad-based Discussion Questions Pg 12**

1. Lock in contractual obligations that cannot be changed by a change in Government policy, without market-based penalties.
2. Commit to a long term [10 year] program.
3. Reduction in long term cost of capital, in return for lowering rent.
4. Ensure affordable rent is built into financing contract
5. Conduit for expansion.

**Model 1: The Housing Bank as an Aggregator**

The Housing Bank will serve the described function of aggregator, of both raising finance and distributing loans.

The Housing Bank will be a private sector intermediary, using well-established mechanisms and partnering with:

- Government for support
- Investors for finance
- CHPs for housing delivery

The Housing Bank will use Government support to “prime the pump”, establishing a track record with CHPs and Investors. It will build up >\$250m in equity, which it will use to maintain its affordable housing sector borrowing and lending activities, after the Government support has expired.

## Discussion Questions

- The Housing Bank submission contains a proposal that resembles the THFC.
- The Housing Bank submission focuses on maximum private sector capital for a minimum Government commitment.

## Model 2: Housing Trusts

We believe, after extensive liaison with superannuation managers, that they will not be attracted to a residential real estate trust that offers equity investments, especially for affordable or social housing. Factors include:

- There is no established asset class in residential real estate, even on a commercial or market basis.
- They do not believe that financial returns can be sufficient for perceived risk.
- They do not know how to value market residential real estate, much less affordable or social homes, and many read commentary that the market is in a bubble.
- They do not want to carry the risks associated with tenancy management, including:
  - o Occupancy, rent collection, service provision; and, in particular
  - o The moral hazard or “Today Tonight” risk – negative publicity around ejecting hardship tenants (single mum or old lady tenant).

We propose that the only solution for attracting institutional investors into affordable housing is a debt product, relieving them of the equity risks.

## Model 4: Social Impact Investing

Impact Investing is in its infancy in Australia. The existing investments, including Social Impact or Benefit Bonds, generally display the following characteristics:

- Sub-scale
  - o The larger Superannuation funds require an investment of >\$50-75m, and they often do not want to represent more than 10-15% of any fund. So the fund size must be \$500-1,000m.
  - o The existing NSW SBBs are \$7-10m, most social enterprise investments are <\$1m, and even the property investments seek equity of <\$10m.
- High risk
  - o Perceived risks and returns do not yet stack up for commercial investors.
  - o The SIBs, for example, are famously marketed as “equity risk with a debt return”.
- Bespoke
  - o Each transaction to date has been unique, with its own set of characteristics.
  - o No intermediary has built a track record, and no asset class has been established.

This Housing Bank paper proposes the first institutional-scale impact investing opportunity, and the first to attract Australian superfunds. They were consulted in its creation and have indicated their desire to participate.

## Discussion Questions

1. We believe a debt model is the only way to attract institutional investors into affordable housing.
2. The Housing Bank paper proposes the appropriate minimum settings to be a contractual obligation to pay the coupon on a bond, where the principle is secured against a portfolio of first ranking residential mortgages.
3. Increasing the supply of affordable housing is the first step in enabling low-income families to improve their accommodation, taking their first steps to progress.

## Other Issues

Critical features necessary in the design of any institutional investment in affordable housing must include:

- Simplicity
  - o Multi-jurisdictional rules must align
  - o Avoid tax incentives, as superfunds only pay 15%, and tax is not a big driver, while it can add significant complexity
- Consistency
  - o Changes to policy add perceived risk...even sovereign risk, when politics is seen to override legislation
- Efficiency
  - o Minimise regulatory burden throughout the process
    - Application, financing, reporting & compliance

## Other considerations

### Housing Bonds

The Housing Bank proposal differs from other housing bond proposals in that it does not require a Government guarantee on the principal of the bonds issued.

We believe that a guarantee would bring the debt back on balance sheet (and on-ratings) and increase the Government's moral hazard. When Government guarantees the debt, it might as well just borrow to fund the housing.

### Policy Flexibility

The Housing Bank proposal is sufficiently flexible to accommodate policy overlays. For example, in relation to housing construction, CHPs bidding for loans may be prioritized by any number of criteria, including:

- o Postcode or location;
- o Adjacency to amenities;
- o Supplementary tenant services; and
- o Special housing for groups like Indigenous, disabled, aged, etc

## Can this mechanism be used to fund social housing?

Yes, this mechanism can be adapted to finance Social and other housing, but it will require:

- Additional subsidy, as social housing rents are lower than affordable: ~25% of market + CRA vs 75% of market; and
- Additional security - Further detailed discussion would be needed with Ratings Agencies and Superfunds, due to the negative perception of social housing as appropriate loan security.

## Scalable

The Housing Bank proposal may be scaled down for pilot purposes or up to increase the number of dwellings from 10,000.

The only non-scalable factor is the establishment costs.

## Off-Balance sheet for Ratings purposes

Discussions with Ratings Agencies confirm that there are precedents where debt like the Housing Bank debt as proposed (coupon guaranteed, but not principal) is not consolidated onto the Commonwealth's balance sheet for Ratings purposes.

## **Author**

Andrew Tyndale

- Had a successful 26 year career in commercial investment banking in groups like Macquarie Bank, Babcock & Brown and UBS' predecessor.
- Since forming Grace Mutual in 2009, Tyndale has been using these banking skills for the social sector.
- In 2013, Tyndale was awarded a Fulbright Professional Scholarship in Social Impact Investing, and spent much of 2014 in the US studying this emerging field.
- Through Grace Mutual, Tyndale has received Ministerial Approval in NSW to run a pilot for a proposed Pay-for-Success (Social Impact Bond) in the aged care space.
- Tyndale is a member of the Australian Advisory Board to the Global Social Impact Investment Steering Committee.

## **Participant Partners**

- Allen Partners is an Australian-based advisory firm assisting leading global asset managers to be appropriately represented in Australia and New Zealand and to successfully raise institutional capital in this increasingly large and globally significant capital market. Allen Partners has deep, long-term relationships across the Australian and New Zealand superannuation and investment management industry combined with direct alternative asset investment and investment banking experience.
- National Australia Bank is one of Australia's premier trading banks, and has extensive experience in capital markets design and issuance. NAB is a leading player in the Australian impact investing arena, and is represented on the Australian Advisory Board to the Global Social Impact Investment Steering Committee.

## **2. Submission: The Housing Bank**

### **Executive Summary**

Housing affordability remains one of the key social challenges facing Australian families, and is reflected in daily coverage in most capital city media. Affordable and stable housing is one of the key factors in reducing social stress and building successful communities.

The issue affects housing purchasers and renters, as the demand and supply imbalance drives both prices. The rapid rise in residential rental rates reflects the rise in property prices, and disproportionately impacts young and low to middle income families that are likely to remain in the rental market. These families include the workers essential to a strong economy: teachers, nurses, police officers and emergency workers, hospitality workers, etc.

This paper proposes a Commonwealth incentive program to assist with the financing and construction of 10,000 new affordable rental dwellings (rent at <80% of market rent).

The program cost is \$1 billion over 10 years (starting in ~2 years), and generates a number of benefits:

- Attracts up to \$5 billion in private capital and industry investment;
- Accommodates up to 40,000 people currently experiencing rental stress, saving them up to \$400 million in rent;
- Creates The Housing Bank: an affordable housing financing intermediary that will continue to finance new developments after the Government program ends;
- Generates as much as \$2.9 billion in legacy benefits to the sector<sup>1</sup>;
- In addition, the program generates significant economic growth and job creation<sup>2</sup>; and
- Positively impacts the demand and supply imbalance, generally helping to slow the rate of rent rises.

The proposal has been developed by the private sector and has attracted support<sup>3</sup>:

- from investors managing a collective \$300b in investment funds;
- from Community Housing Providers managing thousands of affordable and social dwellings; and
- financial intermediaries, including a major trading bank.

The proposal is simple, uses established market mechanisms, partners with the private sector, comes with management arrangements built in, and can be implemented quickly...although the new developments will take some time to plan and construct.

The Housing Bank is scalable, replicable and can be implemented within the year.

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<sup>1</sup> See Appendix 1 for more detail

<sup>2</sup> See Appendix 1 for more detail

<sup>3</sup> See Appendix 2 for a list of supporters.

## Introduction

The affordable housing problem requires Government intervention, as the market will not voluntarily forgo profit. The problem is too big for Government alone, and private capital is required. What then is the best form of Government incentive to attract the largest amount of private sector capital?

The proposal below is based on a simple premise: the most efficient mechanism for attracting private capital through a government incentive, is to use the incentive to pay the interest on the private capital raised. This approach:

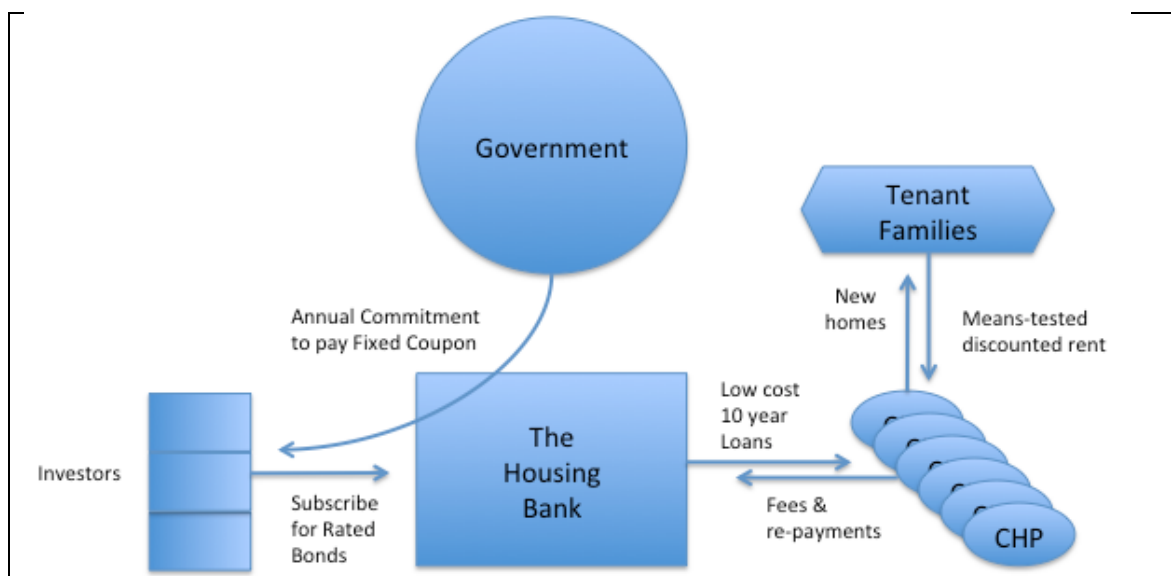
- Generates the largest amount of private capital for the smallest government contribution;
- Raises capital using wholesale markets, through a central financing mechanism where it benefits from expertise, critical mass, higher credit ratings and lower cost; and
- Attracts institutional investors, with lowest cost of capital and longer-term horizons.

In addition, institutional investors have been increasingly seeking ways they can finance the social sector and, given this proposal meets their risk and return hurdles, support for the proposal has been widespread.

We propose the creation of **The Housing Bank**, a special purpose financial intermediary that:

- Makes low cost loans to Community Housing Providers (CHPs) to finance affordable housing;
- Issues bonds to institutional investors to finance the Loans through bond syndication; and
- Efficiently uses Government support to meet the coupon on the bond issues.

## Structure Diagram





## 1. Lending

Loans would be available to CHPs to finance newly built dwellings where they are rented to qualifying tenants at no more than 80% of market rent (equal to the NRAS qualifications).

Loans would be available upon completion of construction and occupation by the tenant, after construction and development.

The Loans could be forward committed as “take out” finance for banks that fund the construction and development of the new dwellings. This would also assist in scheduling the bond issues and spreading the drawdowns and repayments.

Loan Terms (subject to Government confirmation and policy input):

- Maturities would be 10 years from drawdown (although other terms may be possible).
- Secured by first ranking mortgages over newly built dwellings, rented eligibly.
- New dwellings could be of any size and configuration, but to achieve desired outcomes, Loans would be:
  - On a maximum Loan-to-Valuation basis of 75% of market value; and
  - Capped at a maximum \$250,000 for each loan.
- Interest-free (interest being paid by the Government as the incentive).
- Fees of 1.25%pa would apply;
  - To finance the operating budget of the Housing Bank (~.25%pa), making it self-sustaining and not funded by Government, while
  - Building an equity base of 10% or \$250m over 10 years.
- Loan principal amortization of 25% over the loan life;
  - Payments to be held in the Housing Bank as sinking funds for loan and bond repayment.

The CHP submissions would be competitive, with tenders and eligibility determined by:

- Minimum equity capital
- The time to project completion (shovel-readiness)
- The dwelling location (postcodes of excess demand and urban priorities)
- CHPs might also be ranked by their ability to bring additional services to tenants

CHPs would be required to provide annual reporting of critical data, to determine the effectiveness of the policy. This information is already collected and reported.

Loan repayments<sup>4</sup> at maturity would be enabled by a combination of:

- Commercial (bank) refinance of the dwelling portfolio at Loan maturity;
- Sale of a portion of the housing portfolio to reduce debt; and
- Application of the sinking fund of ~25% of each loan, held by THB.

Penalties would be built in for early repayment and for breaches of compliance.

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<sup>4</sup> See Appendix 3 for Risk Discussion

## 2. Bond Issuance

The Housing Bank will issue bonds to wholesale investors to finance its loans for affordable dwellings. The proposal utilizes a standard market mechanism, used regularly for Mortgage Backed Securities and other asset-backed securities. The simplicity of going down a well-trodden path enables the lowest cost and easiest approach to introducing a new investment.

Bonds will have the following core characteristics:

1. The interest coupon will be paid by the Commonwealth government; and
2. The Capital will be protected by:
  - a. a portfolio of first mortgage loans over newly built dwellings in locations of supply shortage;
  - b. unsecured obligations by borrowing CHPs (equity);
  - c. the amortization payments collected by THB (~25% of loans by maturity); and
  - d. equity accumulated in THB as a result of interest on sinking funds or an excess of fee income over costs of management (~1%pa or 10% by maturity).

Investors will expressly acknowledge that their recourse is limited to the Housing Bank's Loan portfolio, and that they have no claim on the Government for any defaults beyond contracted coupon commitments. Total cost to Government will be quantified in advance.

The bonds will be rated by a major Rating Agency. This enables institutional purchase, and reduces the cost of funds. Preliminary talks indicate an investment grade rating.

The bond maturities will match the loan maturities, with the Board retaining flexibility to manage its asset/liability profile.

The bonds will be issued in tranches to match the expected demand from borrowers. This will also serve to stagger the repayments, easing pressure on refinancing.

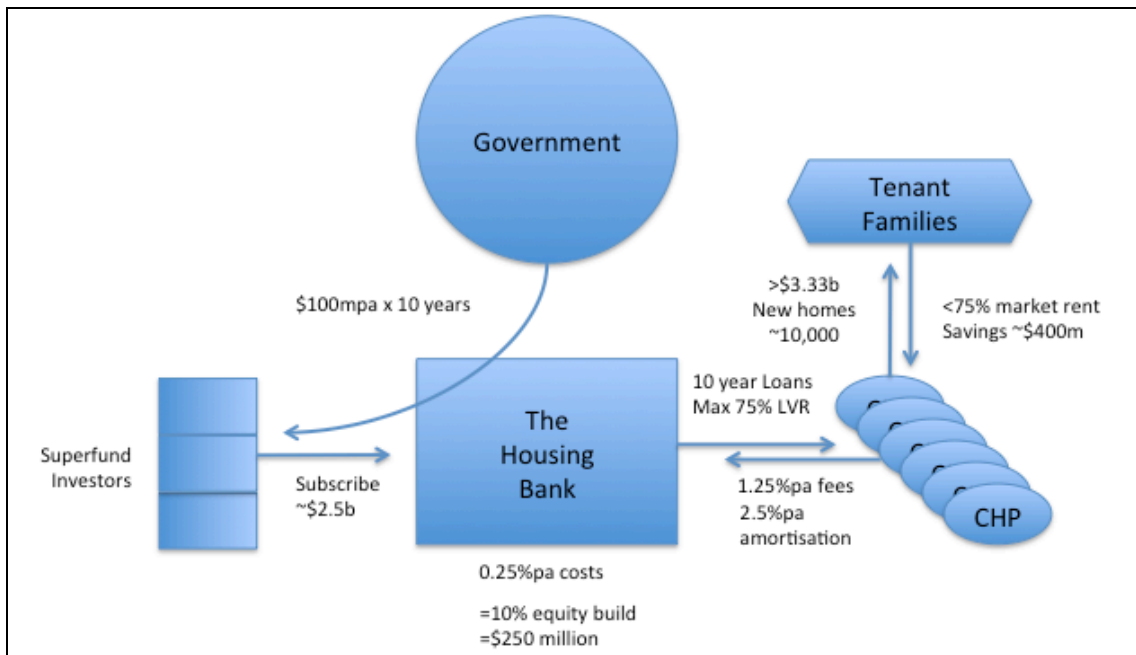
In addition to meeting risk and reward hurdles, investors can point to a positive social benefit. Such impact investments are in high demand.

### **Pricing.**

Each tranche of bonds will specify the maturity, the rating and the quantum of annual Government support assigned to that tranche. Investors will respond by bidding capital amounts which, when back solved, generate acceptable investment interest yields.

For example, for a 10-year bond with \$10mpa in coupon, an investor may bid \$250m. This would equate to a yield of 4%pa, or a margin over the relevant index sufficient to meet the investor's requirements. The largest bid (or lowest yield) would win the tender.

Fund Flows Diagram



### 3. New Entity – The Housing Bank

The new entity, the Housing Bank, would be a non-profit, special purpose vehicle governed by an independent Board and managed through contracts with financial institutions for the following core functions:

1. Lending
  - Origination, credit analysis, documentation, loan management, etc
2. Bond Issuance
  - Bond syndication and distribution
  - Collection and payment of interest
  - Investor reporting, tax, accounting, etc
3. Government reporting
  - Data collection and submission, compliance, etc

In this way, the program will be managed by the private sector, further reducing the cost to Government. Costs of management have been built into the financials:

**P&L** (example only)

Costs	\$6.25m	25bp pa x \$2.5b
Revenue:	<u>\$31.25m</u>	1.25% annual borrower fees
Equity added pa	\$25.00m	= 1.0% equity.
Equity at 10 years	\$250.0m	= 10% equity in 10 years

In this way, the Housing Bank would build a minimum capital base of \$250m over the 10 years. This equity adds further security that the bonds will be repaid.

This equity accumulation would form the equity base for continued activity in borrowing from the market and lending to CHPs for affordable housing.

### **Management**

Each of the core functions (including liquidity management and asset & liability matching) is a standard function within any of Australia's trading banks, and different functions can be found in a number of other financial intermediaries. Government reporting may be contracted out.

One of the major trading banks has offered to handle the establishment of the vehicle (which may include covering legal fees, costs of rating, other professional advice and fees) in return for a contract to manage it. Its outlays would be repaid through the annual fees paid by borrowers.

The bank has also suggested that it will introduce other major banks to various roles, and would manage this process as part of its contract.

### **Control of the Housing Bank**

We believe Government can retain sufficient influence over the Housing Bank so as to ensure its interests are protected, while avoiding the positive technical control that may result in consolidation of the Housing Bank's liabilities.

The Housing Bank would be a Company Limited by Guarantee, with Directors and relevant Ministers being members. The initial Board of Directors would be sought from the finance and CHP sectors, and the Chair would be a key appointment.

Negative control provisions would list the circumstances under which, as a protection while the contract to pay the incentives is on foot, the 2 Ministers (Treasury and Social Services) acting together could remove the Housing Bank Directors.

We believe this structure can ensure that the Housing Bank liabilities are not consolidated onto the Government's balance sheet for accounting or ratings purposes. There are precedents.

### **Reporting**

The Housing Bank will also collect data from CHPs on the tenants, including their salary, the market rent and the rent paid, the number of dependents and all other matters needed for compliance. This information is currently reported for NRAS, and can be replicated for this program.

## **4. Policy Options Available**

The Housing Bank proposal offers Government additional flexibility around social policy options if it decides to pursue them.

Most of these drive different outcomes in the location and nature of housing created.

Adjusting the features of the loans, or the eligibility of borrowers, may have different impacts:

- Loan size and LVR – Can be used to drive the creation of smaller dwellings.
- Priority locations – Priority (or quota) systems can be used to drive development in urban areas, where the jobs are likely to be located going forward.

- CHP eligibility – Limiting the eligible borrowers to those with a minimum equity position may screen for professional borrowers.
- Priority formats – Rewarding apartment applications over other dwellings, or prioritizing larger unit developments, will drive densification.
- Special tenants – Indigenous, disabled, aged, etc.

The proposal can readily incorporate State Housing Departments, but can also operate without them. They have previously listed postcodes of rental stress, and these could be used to prioritise loan applications.

## 5. Conclusion

We believe affordable housing is such a significant problem for Australia that the Government must develop a policy to address it, and we believe a supply side initiative remains the most attractive option.

The Housing Bank proposal bridges the gaps between Government, Superfunds and the Community Housing sector.

The Housing Bank is a simple private sector-led solution, using established market mechanisms, designed with management arrangements built in (self-funding). It would become the first institutional-scale social impact investment to attract Australian superannuation funds.

We believe that the proposed Housing Bank offers a viable, empowered entity, focused solely on delivery that will:

1. Attract the largest amounts of institutional capital for the smallest amount of Government funding;
2. Provide incentive to create 10,000 new affordable rental dwellings due to the long term, low cost debt available to approved CHP participants; and
3. Minimise the costs to Government of both the incentive and program management.
4. Create an affordable housing sector finance vehicle (The Housing Bank) to sustain funding services after the 10 year program expires.

The Housing Bank is scalable, replicable and do-able.

## ***Appendix 1 – Calculation of Cost and Benefits***

### **1. Lasting impact from The Housing Bank Program**

We enclose a summary model that shows the calculations for the conclusions below. We have looked at the net benefits by breaking down the Impact on the various participants.

- a. **The Tenants.** The ultimate target beneficiaries are the Tenants who will pay a discount to market rent for 10 years, enabling them to de-stress for a period, and to enjoy stable housing near their employment. At a minimum, it appears that middle and low income Tenants will save >\$300m in rent in the course of the program.
- b. **The Community Housing Sector.** By receiving the commitment of low cost, long-term debt, CHPs are given the confidence to build new dwellings for affordable rent. This benefits them in a number of ways, including:
  - a. Receiving rent in excess of their cost of funds for 10 years. Net benefit up to \$828m.
  - b. Developing new assets will normally create a development gain. At 15%, this could reach \$500m.
  - c. Creating new assets that are likely to grow in value over time, creating equity in their balance sheets. At 2.5% inflation, this asset value growth adds \$933m to the collective CHP equity position.
  - d. Intangible benefits include increased capacity to manage large balance sheets and developments, and better track record with investors in managing repayments and asset portfolios.
- c. **The Housing Bank.** The Housing Bank can build an equity base of >\$350m (equity accumulation + interest on balances), enabling it to become a sustainable sector borrowing vehicle with a life after the Government intervention period. This equity primarily arises from the 1%pa contribution by borrowers (+interest), and by the Government contributing its funds as capital in the vehicle and the interest benefit of investing the capital before it is required to service the dividend.

**If all these benefits are achieved, they would total >\$2.9billion, an attractive multiplier on the Government's \$1 billion contribution.**

Of the benefits above, the key items for the affordable housing sector into the future are:

- a. The equity built up in the Housing Bank, enabling it to become a sustainable CHP sector financing vehicle; and
- b. The increased critical mass in the CHPs (equity and asset-bases), enabling them to access greater financing volumes at lower cost of funds.

The track records of the Housing Bank and its underlying CHP borrowers through this initial bond issuance period, will add comfort to the institutional investors in renewing the financing, even without Government assistance.

## 2. Other benefits from increased economic activity

The benefits above do not include any revenues to the ATO from increased economic activity, or to State and Local Governments from fees associated with construction and development approvals.

A December 2013 “value-for-money” analysis<sup>5</sup> prepared by Bond University on the NRAS program found: “While the primary goal of NRAS is to increase the supply of affordable rentals, various activities associated with the provision of such dwellings result in economic benefits in the form of employment generation.”

That study referenced coefficients from the Australian Bureau of Statistics (1995) publication, “Information Paper Australian National Accounts Introduction to Input-Output Multipliers – Catalogue No. 5246.” These coefficients are:

- 10.009 full-time equivalent jobs created in the construction industry for every one million dollars of construction activities; and
- 1.727 full-time equivalent jobs created in other industries for each job created in the construction industry.

Based on the assumptions, Personal Income Tax and Medicare Levy revenue to the Commonwealth Government is \$1.097 billion, and would be received in advance of the outlay.

### Assumptions:

- Maximum loan sizes of \$250,000 and maximum Loan-to-Value Ratios of 75%, result in a minimum value of \$333,000 per house created.
- The proposed program of 10,000 houses would therefore correspond to a minimum program spend of \$3.3 billion.
- At the above multipliers, the proposed program would generate 90,972 new jobs, or:
  - 33,360 direct jobs; and
  - 57,612 indirect jobs.
- Each job is assumed to last for 12 months, pay the median annual personal income (2011) of \$59,472, and income tax and Medicare Levy of \$12,064.

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<sup>5</sup> National Rental Affordability Scheme: Economic and Taxation Impact Study. Author: Professor George Earl.

### 3. Summary model

#### Legacy Benefit of Government Contribution

##### Leverage Assumptions

Bond interest rate	4.00%
CPI	2.50%
Loan interest rate	1.25%
Loan size	250,000
Market Rent as a % of Market Value	4.00%
Maximum Rent as % MV	80.00%

##### Government contribution

Total contribution	1,000,000,000
Annual (in advance) Investment (x10 years)	100,000,000
Pilot	
Present Value (assuming paid from Day 1)	853,020,284

##### Private & Industry Capital Crowded-in

Private Capital raised	2,500,000,000
LVR	75%
Market Value of Homes/Capital "Crowded in"	3,333,333,333
Number of Loans/Dwellings	10,000

##### Benefits

##### A. Rent Saved by Middle Income Tenants

Market rent @4% MV	133,333,333
Avg Mkt Rent with CPI increases	152,005,636
Average Rent savings pa	30,401,127
Rent savings over 10 years	304,011,273
Total Savings Accrued to Tenants	304,011,273

##### B. CHP equity value generated

1. Development margin realised @15% MV	500,000,000
2. Asset Value increment of 10 years CPI	
MV assets created year 1	3,333,333,333
MV assets year 10	4,266,948,481
CHP Equity created by Value growth with CPI	933,615,147
3. CHP equity from Rent > Cost of funds	
Average Market Rent	152,005,636
Proportion funded by Loan	75%
Average Rent attributable to Loan benefit	114,004,227
Annual Cost of Loan	31,250,000
Average annual benefit	82,754,227
Benefit over 10 years	827,542,272
Total Equity created in CHPs	2,261,157,419

##### C. AHFC Equity created

1. Annual excess receipts @1%	25,000,000
10 year accumulation	250,000,000
2. Interest on Equity accumulation (@ CPI)	16,001,057
3. Interest on capital during Timing difference	86,803,053
Total Equity Created in AHFC	352,804,110

**Total Value Created by Govt Contribution** 2,917,972,802

##### E. Economic activity

Jobs created and tax paid	
Council Fees and Rates	



## Appendix 2 – Risk Discussion

The primary investor risks concern the ability of the CHP borrowers to repay the Loan, without the need to exercise security over the property.

At inception, the loan cannot exceed either \$250,000 or 75% of the market value of the home.

Loan	\$250,000
LVR	75%
Minimum Value	\$333,333
CPI	2.50%

- Given the prices of urban dwellings, it is likely that their starting value will exceed \$333,333. To the extent they do, the starting LVR will be reduced. It is likely that the opening portfolio LVR will be well below 75%.

Day 1				
Value	\$333,333	\$375,000	\$400,000	\$425,000
Loan	\$250,000	\$250,000	\$250,000	\$250,000
LVR	75%	67%	63%	59%

- We are working on an amortization pattern of 25% over the life of the Loan. This will take the form of a sinking fund held by THB as security for Loan and Bond repayment. In effect, 25% of the Loan will have been repaid by Maturity. This reduces the LVR considerably.

Year 10				
Value	\$333,333	\$375,000	\$400,000	\$425,000
Loan	\$187,500	\$187,500	\$187,500	\$187,500
LVR	56%	50%	47%	44%

- This position does not account for any increase in the value over the 10-year loan period. Assuming a 2.5% annual value increase, the LVR's at Maturity are further reduced.

Year 10				
Inflation =	2.50%			
Value	\$426,695	\$480,032	\$512,034	\$544,036
Loan	\$187,500	\$187,500	\$187,500	\$187,500
LVR	44%	39%	37%	34%

- The entity will have been accumulating the excess fees (1% each year) and should have an equity position of ~10%, also available for repaying bonds and covering default.
- Market rents will have grown from inception in roughly the same manner as the value of the property. If the home were to leave the affordable sector, rents would return to market, and be available to refinance debt.
- The Bank will manage the entity and exercise any security.
- Tenants are protected for the lease term, and house sales are subject to tenancy rights.

It seems a remote possibility that any investor could be associated with foreclosure and eviction.

