NatEquity, Inc. National Equity Access for Senior Homeowners

NatEquity Knowledge Base

Learning the Lessons of the Private Jumbo Equity Access Mortgage Marketplace
Updated July 10, 2018

1 Framing the Issues

Private Home Equity Access Mortgage-type products were first introduced in the United States 30 years ago, but until 2010 there were only four active companies promoting them. After proving the products had a strong market acceptance, all four are out of business today, because of their own mistakes in the market, or because accounting rules forced upon them destroyed their profitability. Then as now, because the products' design, marketing and distribution are directed toward older homeowners, they are held to a higher standard because lenders have and may again use predatory practices on vulnerable seniors. This author has been at the center of this market since its inception and is part of a strong team of in-house executives and knowledgeable outside advisors who have drawn upon that experience to redesign a product and a business model that previously at Transamerica and again now, in fact and in perception, is balanced and fair.

Given their history, a company that specializes in these products must ask, "What can go wrong"? Businesses can get started, but do not survive if they cannot achieve the return on equity (ROE) that investors require. That hurdle rate in the 1990s, as it is today, is about a 13%. Meeting or exceeded that ROE "value-added breakeven" comes from proper execution of a business plan built on products whose design, when bundled into portfolios, produce that ROE in the prevailing regulatory and accounting climate. Having a team that has produced that ROE in prior companies and can overcome the disclosure, marketing and distribution perils inherent in the industry, is the key to success. NatEquity's management team has done this and has unique intellectual property that allows us to produce an acceptable ROE value-added yield that others cannot match.

A major error in the HECM product often exploited by originators, only recently corrected, has been promoting large upfront lump sum payments to senior homeowners. History, supported by a HUD Inspector General's audit, shows that large upfront lump sum loan draws are often used to dig out of other financial problems. The few lump sum loans we made at Transamerica proved this to be the case. Low LTV monthly payment advances to prudent senior homeowners create a sustainable business model where homes are not allowed to fall into disrepair by seniors anticipating a stream of future income.

In this paper, the experiences of the five-failed jumbo equity access companies will be used to highlight issues that NatEquity and our advisors have analyzed and developed strategies to overcome. Each company had different product parameters and business styles, but the ultimate closure of each one is illustrative as NatEquity goes forward. These five companies are Freedom Financial, Providential Home Income Plan, Transamerica HomeFirst in the 1990s and NestWorth much later.

Freedom Financial. Freedom was started in the early 1990s by Bob Bachman as a “trade your house for an annuity” type of equity access mortgage. Freedom overcame the ROE issue by having its funder, Unum Insurance Company, design a single premium annuity where the home was the collateral for the purchase of the annuity. Because it was operating in a pure insurance regulatory world, it sidestepped the accounting issues others would have to confront. Ultimately, it stopped writing contracts in about 2000 when Unum lost its appetite for that book of annuity business. Freedom then transformed itself into a HECM government guaranteed reverse mortgage originator. Financial Freedom did continue to originate lump sum private equity access products.

Providential Home Income Plan. This equity access mortgage company was started by Bill Texido, ex of U.S. Leasing, in 1990, and enjoyed a successful IPO in 1992. For all its financial prowess, it was borrowing short at high rates and lending long at lower rates. Providential’s early IPO success put it under regulatory scrutiny. In July of 1992, the SEC issued accounting and portfolio ROE guidance rules punishing Providential for inflated portfolio valuation and accelerated revenue recognition caused by unreasonable early move out assumptions and thus early contract maturities to boost value. The SEC accounting guidance was the first attempt to invoke mark-to-fair value accounting on a longevity dependent product. This guidance required all costs to be expensed annually and only allowed income to be recognized based upon the hypothetical NPV of future portfolio cash flows. Providential had been quick to make substantial cash advances to senior homeowners without responsible credit underwriting, based upon the false assumption that seniors would move out and terminate their contracts early. The SEC accounting rules, combined with its poor product design choices, yielded a near zero REO for hypothetical future cash flows in their portfolio of contracts. Providential went out of business in 1993 before the end of the Section 144 lockout period, and before the founders could reap a profit on their stock.

Transamerica HomeFirst. Acquired in 1992, this was the first successful jumbo equity access mortgage company, and operated in thirteen states. Reliance HomeFirst was started by Peter Mazonas in 1989 and sold to Transamerica in 1992. As the company became successful, its conservative product design allowed it to produce a portfolio ROE in excess of Transamerica’s 13% required hurdle rate, even after the imposition of the SEC accounting rules. Under those rules, all costs needed to be expensed currently and revenue could only be recognized up to the annual IRR of a hypothetical portfolio of contracts. In 1995, Transamerica’s auditors, Ernst & Young, required HomeFirst to switch to the longer than reasonable Society of Actuary annuity mortality tables to value the portfolio. This drove the portfolio yield below Transamerica’s 13% hurdle rate. The Transamerica HomeFirst master portfolio of 15,000 contracts was sold to Lehman Brothers in 1999 to release cash flow and trapped portfolio profits, and the operating platform was sold to Financial Freedom, later acquired by Indy Mac. In 1999-2000, Lehman bundled contracts rated by Moody’s as Aaa and NAIC 2 (A-) and sold the securitized the portfolios as SASCO-RMs at a substantial profit.

Wells Fargo Bank stepped in to fill the jumbo market needs by writing home equity lines of credit (HELOC) loans. This existing product, coupled with lax regulatory oversight, sucked the air out of the market until the financial crisis that began in 2008. Wells Fargo and others stopped writing HELOCs in 2008. Subsequent regulatory changes have made this product unavailable to seniors without sufficient earned W-2 income. Borrowers under these HELOCs have and continue to suffer “resets”. This means the $100 a month interest only loan now has a short-term amortized principal component bring the month amount due up to $1,000.

Operationally, HomeFirst did most things right. Management had prior experience in senior markets. Conservatism was enforced by the overarching backdrop of a major risk averse public company. Solutions to the "What can go wrong" question were addressed early and proactively kept in sight. Consumer disclosures were thorough, business processes were followed and continued contact with homeowners and their families was a cornerstone of the business philosophy. Every time one of the issues discussed below came to light, it had either been considered in drafting the legal documents or disclosed in marketing materials.

NestWorth. This author was NestWorth's interim CEO from 2015-2016. I brought a new management team to NestWorth in late 2015 to turn around the business through better product design and recapitalization. Unfortunately, the company was too financially broken to save.

Before our time, NestWorth began originating three different type of "equity sharing option" products in 2009. The Company was chronically underfunded and, after writing 28 contracts, discontinued originations in 2010, but continued to honor its $150,000 per month funding obligations. Insufficient contracts meant management never had to confront issues of portfolio ROE. Although a home appreciation sharing product, many of the contracts gained their value by being pegged to the Case-Shiller MSA-based home price index. No attempt was made to select homes in high appreciating zip codes within each MSA. NestWorth's original management team operated as if these were conventional mortgage type contracts to be originated and passively held until maturity without any knowledge of the uniqueness of the senior market. Lack of servicing oversight gave the Company little if any understanding and control over its portfolio. Each contract was a fixed term 5-year or longer agreement written on the lives of "seniors" as young as age 62. Thirteen of the contracts were abandoned in 2013, with the debt left on the balance sheet. In March of 2016, the remaining eleven contracts were forfeited to third party creditors who could hold the contracts off balance sheet to shield them from accounting rules. This left the Company with $8 million of spent debt or equity and over $1 million of unpaid wages and payroll taxes due to new management the Board had recruited. Regrettably, prospective funders recognized the Company was too broken – had too much debt - to risk fixing. The Board disbanded the insolvent company in late 2016.

2 NatEquity at a Glance

NatEquity was formed in early 2017 by Peter and Marcia Mazonas and Eric Ranson, an actuary I had brought into NestWorth. From the beginning we had a "soft circled" equity partner in friend Peter T. Paul, a successful legend in the mortgage business. NatEquity's management owns or controls the intellectual property (IP) that provides the Company a first mover competitive advantage in the market for jumbo equity access mortgage type products. This IP, the Longevity Cost Calculator (LCC), allows portfolios of NatEquity contracts to be bundled at an acceptable ROE measured under GAAP rules as the risk adjusted discounted net present value (NPV) of future portfolio cash flows. NatEquity is a home equity shared-appreciation option contract aimed at seniors living in eleven coastal counties of California with homes valued at $1.25 million plus. This initial market demographic consists of 2.1 million households, ages 75 or older. Many of those owners have aged in place by enjoying the low property tax benefits bestowed by Proposition 13, which froze property taxes at 1980 levels. They are the teachers, public servants and professionals who bought close-in suburban homes in the 1970s and 1990s that are now worth $1 - $3 million. These now house-rich seniors are trying to live on pensions or Social Security averaging $1,300 per month, and they simply need more cash to pay for medical and other expenses as they age in place. Because their Social Security and pension income is not earned W-2 income, they are excluded under current lending guidelines from tapping the equity in their homes by refinancing or home equity loans (HELOCs). Government-guaranteed reverse mortgages (HECMs) are also not an option, because their home values are well in excess of FHA/HUD's average upper limit of $415,000 in these markets.

That is NatEquity's niche to fill. A NatEquity Option Contract is a longevity-dependent product. We have the most accurate predictive life expectancy algorithm in existence, our proprietary LCC. It allows us to control extension risk while managing the mandatory mark-to-fair value accounting, required under GAAP AUC 820[i]. This allows us to value and underwrite our portfolios with statistically significant accuracy, which no other company can do. Overcoming this accounting valuation barrier to entry leaves management free to focus on marketing, distribution and operational issues.

NatEquity's management team has extensive experience adapting and implementing operating software platforms to the uniqueness of the convergence of longevity products in a real estate environment. Management's operating platform design integrates longevity dependent product pricing into marketing, contract sales and portfolio valuation.

For originations, NatEquity principally relies on hands-on conventional and reverse mortgage originators who have local contact with this demographic, but no products to satisfy these seniors' cash flow needs. NatEquity also has developed a set of follow-on products available for release to expanded markets after we demonstrate the stability of its initial cash flows from our first option product.

NatEquity's product design is to make monthly payments to senior homeowners to supplement other month cash flow. Other than up front small "catch up" payments to clear out credit card debt or make necessary home improvements, no front-end lump sums are contemplated. This conservative product design yields a very low LTV portfolio.

NatEquity Secured Warehouse Line Balance Growth vs. Loan to Value (LTV) of Collateral

	Y/E 1	Y/E 2	Y/E 3	Y/E 4	Y/E 5
Y/E Loan Balance	**$30,256,089**	**$31,039,937**	**$165,094,490**	**$391,964,763**	**$705,717,710**
Annual Interest Cost	$876,173	$3,191,680	$9,812,785	$30,849,321	$62,922,915
NPV of Contracts	$71,823,828	$141,084,668	$421,422,347	$797,229,997	$1,246,372,876
FMV Home Contracts	**$440,760,712**	**$1,919,673,566**	**$3,655,042,860**	**$5,374,018,814**	**$7,037,925,276**
LTV this Period	**7%**	**2%**	**5%**	**7%**	**10%**

3 HUD HECMs, Private Jumbo Equity Access Mortgage Type Products, and the Market Environment

Unlike the U.S. Government's Home Equity Conversion Mortgage (HECM) program, private products do not have a government guarantee to fall back on and wash away their sins. The HECM product design enjoys immunity from accounting and valuation rules. The Mortgage Insurance Premium (MIP) charged borrowers by the Government has never been adequate to cover program losses. Ultimate contract losses are put back to the U.S. Treasury and taxpayers absorb losses.[1] The annual MIP deficit/loss from HECM loans gone bad is $4 billion – with a $14 billion accrued future loss as of year-end 2017. The HECM program has evolved into a government entitlement to allow seniors age 62 and older to access equity in their homes to supplement cash flow. The backing of the government guarantee has allowed mortgage originators to sell product without rigorous underwriting, value these contracts at cost, and then yield profits by bundling these loans as government-guaranteed Ginnie Mae securities. The average home value in a HECM portfolio is in line with the $317,000 average national home value.

A 2014, the HUD Inspector General's report found that in a random audit of HECM loans, 86% contained fraud[ii]. This finding is important because the types of fraud uncovered span the spectrum of "What can go wrong." The principal issue was seniors taking a front-end lump sum of cash, which left them with no continuing monthly income to pay taxes and insurance, and/or renting out their house, which triggered foreclosure when it was discovered.

For the second time since 2015, HUD has made changes to the HECM program to address design problems and program abuses. In 2016, HUD limited immediate lump sum loan draws, increased mortgage insurance premiums (MMI) and added income qualification to exclude borrowers with insufficient other income who might default. In October 2017, MIP on lump sums will be increased from 0.5% to 2% and monthly draw amounts will be further reduced. Because of the entitlement nature of the HECM program HUD and Congress cannot discontinue it, but they can and will continue to cause "death by a thousand cuts".

A product and business model honed by lessons taught and learned in this 30-year-old private jumbo equity access mortgage type product market will be NatEquity's key to success. NatEquity's exclusive access to the LCC[iii] and the valuation methodology used to underwrite and value portfolios of NatEquity contracts puts NatEquity in a unique market position. Applying the proprietary valuation methodology allows NatEquity to value our low LTV portfolios using a low risk adjusted discount rate to NPV future cash flows. This creates cumulative accretive value on GAAP balance sheets and incremental annual additional value on book profit and loss statements. Others considering and just entering the jumbo equity access mortgage market are trying to argue that Mark-to-Market is the equivalent of Mark-to-Fair value. Clearly differentiated in the text of the GAAP pronouncements', this clarification supported by the SEC and the "Big 4" independent auditing firms, has yet to be challenged. FASB has draft disclosure requirements to clarify this misconception. HUD HECM securitizers, relying on the government guarantee, can book those assets at cost, similar to Mark-to-Market. All other originators must book contracts initially at a significant loss. Therein lies the problem for all other possible private jumbo equity access mortgage type products.

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[1] A GAO published study in November 2017, estimates HECM loan losses are costing the U.S. Treasury $4 billion per year. They further estimate a current accrued HECM program liability of $14 billion coming due in the next several years from contracts already on the books. There are calls within Government to discontinue the program. This may well be accomplished by the elimination of Government guarantees on GSE products, thereby not putting the onus on Congress.

4 LESSONS LEARNED

1. **Why Not Offer a HELOC Home Equity Loan Rather Than a New Type of Mortgage?** Wells Fargo stepped in to replace Transamerica HomeFirst's jumbo equity access mortgages with HELOCs when Transamerica got out of the business in 2000. What seniors did not understand about HELOCs was that after the 10 or 15-year loan term a HELOC converts to a loan with straight line amortized principal. Many of these HELOCs were reported to have large lump sum draws early in the loan term. This means that a typical $100 per month interest only payment jumped to about $1,000 per month, principal and interest. Making matters worse, the CFPB introduced "Ability to Repay" (ATR) rules during the financial crisis. This means seniors living on pensions or other non-earned income do not qualify for HELOCs or other types of "Non-Qualified" mortgages. Banks or other entities offering non-QM mortgages would have to hold these loans in portfolio or post substantial core capital in the event they sold them in non-QM conduits or other placements. Seniors are stuck with these high payment loans and cannot refinance with conventional mortgage products.

   Another factor going against these above mentioned non-QM mortgage placements is that they are Level-3 longevity dependent assets that must be valued at the discounted NPV of the portfolios unpredictable future cash flows. These GAAP AUC 820 mark-to-fair value rules require unpredictable future cash flows to be discounted at a rate higher than the 16% discount rate that approximates cost. Translated, this means these portfolios must be valued at less than cost, a factor not acceptable to audited market participants. NatEquity's exclusive access to the LCC[iv], allows NatEquity to predict future portfolio cash flows with significant statistical accuracy. This allows NatEquity to value portfolios using a discount rate of less than 16%, thus accreting portfolio value reported for balance sheet and profit and loss purposes by investors.

2. **Why Not Feature Large Lump Sum Payments to Put More Money to Work Sooner?** NatEquity's business model is to provide the assurance of monthly income to senior homeowners and the assurance of an inheritance to heirs. NatEquity will provide advances to modernize kitchens and baths and to replace reset HELOCs. Both of these advances enhance the funder's collateral position. History has shown and we believe this is in the best interest of our funders and both senior homeowners and their heirs. NatEquity profits from highly appreciating, well maintained homes occupied by seniors anticipating a stream of monthly cash advances to allow them to age in place. Owning a strong accruing interest coupon is not a business model we ascribe too.

   NatEquity projects our loan to value ratio to remain at less than a 10% LTV. Our senior homeowners maintain a high equity to home value ratio. NatEquity encourages these homeowners to come to us when they have maintenance issues where they need financial help. Fostering this relationship is crutal to

3. **Accounting Rules May Change (and Eliminate NatEquity's Competitive Advantage)** This is a fair question, but current mark-to-fair value accounting rules have been

under development and refinement for the past 25 years. The current GAAP AUC 820 mark-to-fair value rules imposed in 2014 were actually the outgrowth of financial accounting standard (FAS) 157 from the 1990s, and auditing standards that predate FAS 157. A form of the current rule, now mandatory worldwide, was enacted in the early 2000s, but suspended in 2006 because, had the banking world been forced to mark mortgages to fair value, it would have precipitated a worldwide financial crisis. This crisis happened in 2008 anyway and solidified the need for proper current recognition of contract / portfolio gains or losses. Longevity dependent equity access mortgage type products are a unique application of these mark-to-fair value rules because they sit at the intersection of mortality estimates and fluctuating home values. NatEquity enjoys a unique peer reviewed portfolio valuation methodology[v] that take into consideration and capitalizes on these past 25 years of development experience. NatEquity addresses the second issue of HPA by only operating in areas of stable historic home appreciation.

4. Extension Risk – Homeowners Outliving Their Life Expectancy Estimates

NatEquity's proprietary LCC will allow the Company to screen out homeowners who the model predicts will outlive an acceptable range of mortality outcomes. Likewise, homeowners with unacceptable short life expectancies will in the future be offered other products from NatEquity's inventory. Quarterly telephonic assessments by NatEquity staff will be evaluated by Portfolio Managers to look for inconsistencies outside of what the model predicts. The LCC model cannot predict shorter life expectancy brought about by falls or other life events. An early maturity discount is built into each contract to offset possible lack of appreciation when homeowners die early.

The estimated 15% of seniors still in their homes at the end of contract year 10, will have the option to rewrite the contract based upon the current appraised home value. Should they opt to continue their current payment stream, NatEquity's portion of the home is appreciating in value at a higher rate than the payment stream.

5. Duration Risk – Securitized Portfolios Will Have Tail Risk That Reduces Yield

Assessing each homeowner with the LCC and demonstrating the accuracy of the model with Bayesian Inference allows NatEquity, with substantial statistical significance, to predict individual homeowner mortality and thus future portfolio cash flows. Aside from the AUC 820 Mark-to-Fair Value advantage this provides to each portfolio, it also means that there is little or no undefined duration tail risk in the portfolios.

Before its time, Transamerica HomeFirst, employed a synthetic mortality table based upon the assumption that homeowners "moved out" of their homes when they lost the equivalent of 2 ½ Activities of Daily Living (ADLs). This proved to be very accurate on a portfolio basis, but not on an individual homeowner basis as is the case with the LCC. HomeFirst maintain its internal portfolio of contracts in hypothetical/synthetic portfolios of about 500 contracts each. After the master portfolio was sold to Lehman Brothers in 1999, Lehman Brothers took advantage of this predictability and securitized and sold each portfolio at a substantial premium.

6. Periods of Flat or Declining Home Price Appreciation. Homes allowed into portfolio must be selected based upon historic data, careful professional on-sight observation and market trends affecting individual zip codes and census tracts. NatEquity's initial target markets are the zip codes of the close-in suburbs in eleven California coastal counties. For the past 29 years, these selected communities have enjoyed year-over-year compound home price appreciation in excess of 6%. The three regional MSAs, San Francisco, Los Angeles and San Diego, have themselves averaged close to 6% each. Many of the communities in each of these MSAs are not deemed to be suitable for products whose profit is based partially on home price appreciation. Historical California data shows that when these target markets have gone flat or declined, that trend has only continued historically for 8 to 12 months before rebounding.

   The early maturity discount factored into NatEquity's product design provides a cushion in the event home price appreciation were to go flat for periods of time. In the early years of each contract the maturity discount approximates the amount of cumulative annual payments. During the first three years of each contract, the floor value can be reset to the lesser of the origination value of the then fair market value. In portfolios of contracts not all geographic regions will experience a down-turn, thus adding stability to portfolios with multiple contracts.

7. Not Enough Homeowners to Make a Viable Market. Using refined government and commercial databases, NatEquity has identified 2.1 million senior householders, over the age of 75, in eleven coastal counties of California. NatEquity's first product is a home equity shared appreciation contract for seniors to purchase one-half of the future value of a single-family home for one-half of the home's current appraised value. Our projections assume 0.6% (12,000 contracts) market penetration in 5 years, and less than 2% (32,000 contracts) in 10 years. After a successful proof of this or variants of this product in coastal California, other products will be rolled out in other markets nationally, but the initial product will be proved principally in coastal communities with strong job markets, limited available housing, and higher than national home values and appreciation.

   Since the budgetary crisis of 2008, senior homeowners with home values in excess of the HUD HECM home average value limit of $415,000 have not had equity access products that address their needs. Analyzing big data to find appropriate regional markets in which to concentrate NatEquity's activities will be critical to maintaining our high touch marketing and contract servicing business model. The average home value in America is $317,000. These markets are suited to HUD HECM products and home value limits. NatEquity cannot, and will not, try to compete with a government subsidized entitlement program. There are still more than enough homes to suit our market needs and mortgage originators who do not have product to meet their customer's needs.

8. Homeowners will not accept this new product. This shared appreciation option product is very similar to the successful Transamerica HomeFirst jumbo equity access mortgage, but without the interest coupon. Transamerica HomeFirst sold more than 15,000 of these contracts over a 5-year period, mostly to a similar market demographic in coastal California.

Focus group testing of the NatEquity option contract and, pervious focus group testing of the same product by Transamerica both indicate high homeowner understanding and acceptance.

Discussions with NatEquity's selected conventional and reverse mortgage wholesalers support their need to have this product to satisfy pent-up market demand. Each of two reverse mortgage wholesaler networks indicate their wholesalers each have 50-75 prospects in their databases.

Although not highlighted in NatEquity documentation, a variant of this option product is a 4% accrued interest with a 4% cap on HPA product. The accrued interest component adds downside protection. Capping NatEquity's share of HPA at a compounded cumulative rate of 4% means all HPA in excess goes to the homeowner at time of sale.

9. Securitization or Private Placements of Bundled NatEquity Contracts

Securitization of mortgages and other asset was facilitated by the Tax Reform Act of 1986. Predictability of future portfolio cash flows is critical to attaining and maintaining value. Anticipating the need to securitize private jumbo equity access mortgages to replenish Transamerica HomeFirst's cash position, Peter Mazonas filed for a patent in 1995. Issued in 2000, this patent, (U.S. 6,012,047) is a "method of doing business" patent for a pricing and securitization compute program for longevity dependent assets. Until its sale in 2000, HomeFirst was a subsidiary of Transamerica Corporation. Transamerica needed investment yield and held the contracts in portfolios owned by the parent Company. However, that master portfolio was administered internally as a series of separate portfolios in the event a decision was made to sell them into the capital markets. The release trapped cash and profits, Transamerica sold the portfolio(s) to Lehman Bros. in 1999. Lehman got an investment grade NAIC 2 (A-) rating from Moody's and sold them as SASCO-RMs. NatEquity's LLC and valuation methodology should allow us to achieve the same rating. In addition, NatEquity's Chairman, Peter T. Paul, pioneered the successful securitization of Alt-A conventional forward mortgages in the 1990s. Peter Paul makes the point that the ability to own a portfolio and share in the upside of high value, well located and highly appreciating single-family homes professionally managed by someone else is an investor's dream.

As described in other parts of this writing or companion documents, NatEquity's ability to predict future portfolio cash flows provides comfort to funders and controls portfolio "tail risk". Variants on this and future product designs, all of which have the same mortality predictive characteristics, allow for flexibility in portfolio structure and yield to meet funder needs.

Below is a sample cash reconciliation for an $80 Million private placement:

A Single NatEquity Contract Portfolio
Each Portfolio Sold to Replenish Cash
Full Year Amounts, Actuals Will Shift Categories per Pool

		Per Contract	Per Portfolio
Number of contracts			600
Initial advance, Origination Costs		$27,395	$16,437,000
1st year advances	97%	$30,000	$17,395,414
1st year Management fe	97%		$7,972,898
Sales Commissions			$4,000,000
1st year coupon	7%	$80,000,000	$5,600,000
Full Portfolio Year 1, Contingency Reserve			-$2,491,458
Cost to Originate Portfolio			$48,913,854
Year 2 Reserve Requirements			$31,086,146
Portfolio Sales Price			$80,000,000
Year 1 Cost to Originate Portfolio			$48,913,854
2nd year advances			$16,242,931
2nd year Management fees			$7,444,677
2nd year coupon	7%	$80,000,000	$5,600,000
Full Portfolio Year 2 Additions to Cash			-$6,324,927
Year 3 Reserve Requirements			$1,000,000
Unallocated Reserve			$7,123,465
Portfolio Sales Price			$80,000,000

NatEquity actuarially and statistically anticipates contract maturities in both year one and year two during these periods of high reserve retention. Anticipated first full 12-month maturities, less maturity payments to exercise options are as follows:

Anticipated Year 1 Gross Maturity Proceeds	$23,547,428
Less Maturity Payments to Exercise Options	-$21,019,121
Less Maturity Fees Paid to Management Company	-$36,849
Full Portfolio Year 1 Additions to Cash	$2,491,458
Anticipated Year 2 Gross Maturity Proceeds	$26,608,145
Less Maturity Payments to Exercise Options	-$20,243,561
Less Maturity Fees Paid to Management Company	-$39,657
Full Portfolio Year 2 Additions to Cash	$6,324,927

10. Market does not accept NatEquity Private Placements. Lehman Brothers, by successfully selling the Transamerica HomeFirst portfolios, demonstrated the market acceptance of similar public offerings. NatEquity contracts present the unique opportunity for fund managers and other buyers to participate, at a very low LTV, in the ownership of high quality single family detached homes that are being maintained and managed by the

homeowners themselves. Current GAAP Mark-to-Fair value rules require that contracts/portfolios be valued at the NPV of future cash flows. NatEquity has a license to unique algorithmic intellectual property that allows NatEquity to have the required statistical confidence in predicting future homeowner mortality. This means NatEquity can use a lower risk adjusted discount rate to NPV future cash flows which produces GAAP portfolio balance sheet values significantly in excess of cost. Although the portfolio cash flow IRR is the same as a valuation at cost, NatEquity's risk adjusted discounted NPV of future cash flows produces a valuation approximating two times cost. This means NatEquity Contract portfolios, in a worst-case scenario, can be discounted at sale and still have liquidation value in excess of cost.

11. Homeowner or Family Members Object that They Did Not Understand the Terms or Implications of the Contracts. Written disclosures provided to both homeowners and family members are part of the field agent's process, as is their acknowledged receipt, throughout the process to close of escrow. Plain language product descriptions and transaction outcomes, and copies of blank agreements, are provided during the application process.

The potential issue of claiming not to have been told or not to understand contract conditions or implications was asserted and successfully refuted in each suit brought against Transamerica HomeFirst. Signed acknowledgement of receipt was produced to refute each claim. When adult children are not brought into the transaction discussion at the request of the parent / homeowner, this also is acknowledged in writing.

12. Homeowners Neglect to Pay Property Taxes or Homeowner's Insurance? NatEquity has a disciplined homeowner pre-qualification process intended to isolate and exclude homeowners who have experienced historical financial problems and mismanagement. Proactive budget estimates help determine if the additional monthly cash flow to the homeowner, combined with what they already have in cash flow, is sufficient to pay their bills on a current basis. When homeowners neglect to make property tax or insurance payments, reporting triggers alert NatEquity, which contractually has the right to reduce future monthly payments and impose an impound account to make these payments as required.

HUD HECM reverse mortgages use a simple $99 each "e-Title" insurance policy, which does not adequately protect a funder and relies upon the government guarantee for protection. NatEquity uses more expensive full lender / originator title protection to insure for all eventualities in lapses, misreporting and inaccuracies in title and tax reporting. NatEquity has elected to not make large lump sum up front payments to homeowners that may leave them with insufficient monthly cash flow to survive financially. Small "catch up" advances will be made to pay off credit card debt up to prescribed limits. Larger front-end advances will be made to replace roofs or repair other home damage, and monthly advances will be reduced accordingly, but only down to livable limits. Consistent monthly income aligns homeowner expectations with our portfolio needs.

13. Lax or Fraudulent Appraisals. This is a more prevalent issue than most people understand. The old saying goes that the professional appraisal organizations' initials, MAI, really stand for "Made as Instructed". We have seen inconsistent and inaccurate appraisals,

appraisers overlooking and not reporting subdivided single-family homes, and house photos "cropped" to not show actual conditions. This will not happen with NatEquity appraisals. NatEquity compares appraisal results to database comparables to look for and challenge exceptions. The additional layer of a licensed third-party contractor property inspection, with appraisal in hand, confirms not only the appraisal, but also what home repairs may be needed now or in the future. As at Transamerica, NatEquity will develop a list of trusted local appraisers.

14. Insufficient Replacement Value Homeowner's Insurance. The wine country and Santa Barbara fires in fall of 2017, were reminders of the requirement for both full replacement value homeowner's insurance and full photo documentation of the home's exterior and contents. Built into NatEquity's origination costs are a full home replacement cost analysis as well as the contractor home inspection. Insurance policies must be re-endorsed at full replacement cost value with amply allowances for code upgrades. This latter process will be handled by a large statewide insurance general agency.
15. Identifying and Supporting the distribution channels originating contracts. NatEquity's management has years of collective experience designing materials and training field mortgage originators and buyers of senior financial products. Both NatEquity Home Equity Sharing Option Contracts and other home equity access products target a segment of the senior homeowner market not often encountered by conventional forward mortgage originators. Two of these coastal California conventional originators were funded by Peter T. Paul. Peter Mazonas has met with several of their key agents and they are interested to represent the product. to Seasoned professional real estate agents, have contact with these cash-strapped homeowners anticipating their need to sell to generate cash, but do not have a product to offer them to keep them in their homes. These realtors have co-dependent relationships with mortgage originators. A second group of producers are organized reverse mortgage wholesalers currently selling HECM loans, who do not have access to products for homeowners with home values in excess of the HUD HECM limits. One such group in coastal California has 50 producers, each with more than 50 senior high home value prospects who need a jumbo financial product to supplement their monthly cash flow. A second group of HECM wholesalers, run by a top salesperson from Transamerica HomeFirst, is also interested in selling the product to the underserved jumbo market.

    Using government and commercial data, NatEquity has identified eleven areas in coastal California that have the right mix of senior homeowners and high home values. It has been able to drill down through this data to identify 2.1 million homes that meet its prospect criteria.

    NatEquity has developed and tested a pre-qualification algorithm that uses commercially available data, supplemented by producer generated data in the field. Used on a handheld device, it can immediately identify qualified prospects and marginal prospects, while eliminating unqualified homeowners. This software can generate probable payment examples for the homeowner, integrated with the pre-qualification information from the homeowner to generate preliminary disclosures. An extension of the same software can record the application and electronically upload it to NatEquity with a copy to the homeowner.

    Hundreds of sample housing profile data sets from First American DataTree have been downloaded and merged with other pre-qualification data to profile prospective homeowners.

Methods of correcting errors in stale historic data have been investigated with data specialists at Paragon Realty.

In addition, on the inbound side, computer generated data can cost effectively target direct mail campaigns down to the individual household level. This generates leads coming into an in-bound call center, staffed by a well-trained team of seniors, where prospects are qualified. Qualified and unqualified leads are processed or maintained in NatEquity's Customer Relationship Management (CRM) system. Qualified leads are either provided to network conventional or reverse mortgage producers. About 20% of these internally qualified leads demand to be contacted only by NatEquity staff members. NatEquity uses our staff field trainers to meet with the homeowners and process their applications.

NatEquity's CRM and integrated software stack are designed to keep producers updated on the progress of their prospects via dashboards pushed out to their handheld devices. Emails provide additional training opportunities to highlight aspects of each case. Private channel training videos provide product updates and insights.

16. **Servicing of NatEquity Contracts.** NatEquity Home Equity Sharing Option Contracts commit to making a series of monthly payments to senior homeowners, and "partners" with them to keep homes well maintained and livable. From a NatEquity transactional standpoint, its contracts are recurring monthly accounts payable, with monitoring of homeowner's insurance and property tax payments as well as death records. NatEquity Home Equity Sharing Option contracts profit from anticipated compound home appreciation. A strong element of contract servicing is maintaining contact between homeowners and NatEquity's "call center" staff. Building this relationship permits NatEquity to head off home deterioration issues as they occur and correct them. Quarterly contact, with built in homeowner incentives, is supported by an annual in-home inspection by a private firm under contract with NatEquity. As part of the origination process a home inspection is conducted and any initial repair work is scheduled. Future follow on work is noted in the case file.

    Engaging the family in this process is important. Experience from Transamerica tells us that relieving the family of this maintenance burden makes them willing participants in the process. At any time NatEquity is prepared to step in and advance funds to make necessary home repairs to ensure the continuing appreciation of the property or to protect the safety of the senior(s) living in the home. Any anticipated large repair expenditures not covered by insurance have either been reserved for at origination or will require contract modification. NatEquity is also prepared to work with the homeowner's family to modify the agreement to increase monthly advances to provide for in-home health care. This need for in-home healthcare is usually required for less than 24-months. NatEquity is also prepared to make lump sum advances for funeral expenses, to be recovered out of sales proceeds.

16. **Contract Tracking**. GAAP accounting requires that all origination costs and future advances in private equity access mortgage type products targeting seniors must be capitalized and deducted from sales proceeds at maturity. Tracking these capitalized costs and continued valuation adjustments under GAAP AUC 820 add significantly to the size of the data set for each case.

Both NatEquity Home Equity Sharing Option Contracts and other equity access products are longevity dependent products that use automated tracking of county-level death records which track resident status. These third-party services are relatively inexpensive and have become accurate at doing weekly data sweeps against updated death record data. County death certificate records are cross checked against published obituaries and other data sources. Contract maturity is another event where conventional and senior home equity access mortgage type products differ. NatEquity's mortgage/deed of trust/option contracts have a number of contractual "maturity events" to protect NatEquity and its funders. Although the servicing process is designed to minimize foreclosures, these may become necessary when the homeowner violates terms of the contract and either subleases portions of their home or permits family members to move in permanently without written consent from NatEquity. This is usually headed off by the quarterly telephone contact between the homeowner and their NatEquity call center contact person

Portfolio management on behalf of third-party funders is a critical function of NatEquity's servicing and portfolio management group. NatEquity's unique enterprise management software stack is designed to monitor each transaction from sales lead through the close of final escrow at maturity. Each individual contract/case has a data set consisting of almost 2,000 fields. These are used to track, trend and analyze data over time. Because NatEquity Contracts and private jumbo senior equity access mortgages are longevity-dependent Level 3 assets, their value for GAAP accounting purposes is the risk adjusted discounted NPV of future cash flows. NatEquity employs proprietary analytical consecutive assessment software which allows NatEquity to accurately predict the trajectory of each homeowner's morbidity and mortality. This is important both for accurate portfolio valuation and in assessing when homeowners may need assistance for safety and health reasons. Consistent accurate historic portfolio tracking and valuation are imperative when funders decide to sell a seasoned portfolio of NatEquity Contracts. Consistent underwriting files, followed by proper servicing and portfolio valuation, yield premium portfolio pricing at time of future sale.

NatEquity's software stack will reside on the Microsoft cloud in the U.S. with a mirror image disaster recovery system of both the software stack and real-time data in a separate Microsoft data center in Toronto, Canada. The choice of Toronto is because our development contractor, Procase Consulting, is in Toronto. NatEquity's development servers are in Procase' Toronto facility.

5 CONCLUSION

As with most things in business, the devil is in the details. Having a team with 30 years of senior market and senior jumbo equity access mortgage-type experience helps make all the pieces work smoothly together. Each manger brings a different view of this market, learned before joining NatEquity. Our business processes have been refined in a manner consistent with how we think this business should operate. Each process and document has been viewed from a historical perspective of "What can go wrong" and how to anticipate and avoid issues, while putting the interests of homeowners and their families on an even footing with the desires of our funding partners.

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Edited, June 13, 2018
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Copies of all published papers and documents cited below are available upon request.

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[i] http://link.springer.com/article/10.1057/gpp.2011.25, *Longevity Risk in Fair Valuing Level-Three Assets in Securitized Portfolios*, Peter Macrae Mazonas, Patrick John Eric Stallard, Lynford Graham, the Geneva Papers (2011) 36, 516-543. Doi: 10.1057 / gpp 2011.25. http://www.palgrave-journals.com/gpp/journal/v36/n4/abs/gpp201125a.html
[ii] [ii]http://www.housingwire.com/articles/print/31603-hecm-borrowers-fail-to-comply-with-res
[iii] Ibid, *Longevity Risk* …
[iv] Ibid, *Longevity Risk*
[v] Ibid*, Longevity Risk* …