NatEquity, Inc. National Equity Access for Senior Homeowners

NatEquity Knowledge Base

Lender / Investor Questions Posed to NatEquity
Management and Management Responses

1 QUESTIONS & MANAGEMENT RESPONSES

The Problem: Senior homeowners who bought close-in suburban coastal California homes in the 1970s, who have aged in place and have not had home equity access products for 10-years.

Solution: Reintroduce innovations of market tested private jumbo reverse mortgage type products from the 1990s that are now favorable accounting and regulatory treatment. The experienced team reintroducing these products draws on the 25-years of prior market experience.

1. **Question: Concentrated real estate risk - coastal California:** Response: We strongly differ with the premise that California is a concentrated market mathematically or economically. In fact, it can be demonstrated that California, especially in coastal communities, is more diverse and less mortgage rate sensitive than the rest of the US.

    Most real estate is valued under a basic two factor model: discount rate based and cash flow based. California real estate valuation model inputs require additional factors which other communities do not have: scarcity of buildable land, weather-attractiveness, post-WWII engineering boom (which morphed into computer hardware, software and bio-tech hubs) and the state educational system.

    Also, coastal California has a largely non-native population. The tendency for individuals to move here for the school system and then bring over their families creates annual demand additions dramatically higher in scale than anywhere else in the US (including NYC).

    These demand additions, relative to other states, show up also in a culling system of coastal property prices; only the most successful can afford to live in these communities. As an example, when a school teacher moves out of their home, they are replaced by two senior software engineers.

    a. Target properties are higher FMV, but not on the coast, rather close in suburbs 2 miles through 25 miles from the beach. The prime eleven coastal counties have 2.1 million such senior households. These close-in suburban homes are sought after and usually purchased for cash by upwardly mobile knowledge workers and people in the entertainment industry.
        i. These are young, educated buyers seeking close in homes that they can improve.
        ii. These are geographically, ethnically and industrially different markets, making up a state with 40 million people that is the world's 5th largest economy. This $2.45 trillion of GDP comes predominantly from the eleven coastal counties.

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    b. Coastal California is a post WWII, post-industrial, economy with very little last century manufacturing and related decay as seen in the Midwest, South and East.

        i. In 1960, California united its UC, state college and community college system (9 UC campuses, 31 CSU and 113 community colleges today).

        ii. In the 1960s, California graduated more credentialed teachers than the next five states combined[i].

        iii. In 1970, California graduated more students with bachelor and advanced degrees than the next 6 states combined, all on the East Coast except WA[ii].

    c. Coastal California market has limited buildable land, low unemployment and high historic year over year home appreciation.

    d. Coastal California is a series of unique disassociated markets centering around major universities and nearby diversified local high value employment.

        i. What transpired in San Francisco, Marin and San Mateo Counties is somewhat different from San Jose and lower peninsula.

            1. Before Los Angeles, The Bay Area was the financial center of California bringing large numbers of young teachers and professionals.

                a. In the late 1960s, the core of Silicon Valley, between Palo Alto and San Jose, was all orchards.

                b. Marin County, with average home values more than $1.2 million, is still 30% senior households enjoying low Prop. 13 property taxes.

                c. Menlo Park ($1.5M FMV) and Atherton ($3M FMV), have seen the influx of cash rich tech working, are still 15% senior households.

            2. San Francisco Bay Areas strengths come from the high value jobs generated by Cal Berkley, Stanford and the UCSF Medical School complex.

            3. The LA Basin in the 1960s-1970s was defined by aerospace and defense clustered in Pasadena, Long Beach and Redondo Beach.

                a. LA Basin has UCLA, SC, Cal Tech and Claremont Colleges.

            4. San Diego and Orange County, in the 1960s and 1970s, saw growth near Naval and defense contractor installations and nearby suburbs.

                a. San Diego's major universities included the 1960 opening of UC San Diego near Scrips.

                b. Orange County's UC Irvine opened in 1965, in Irvine, spawning inland development

        ii. Northern California has many characteristics different from the Los Angeles Basin. Unlike the aerospace centric Cold War days, Los Angeles is one of the most diversified knowledge and entertainment based metro areas in the world. In fact, "Silicon Beach" in Los Angeles is accelerating the increase in population density, thus supporting our market example.

2. **Question: Ramp up risk (from origination perspective and capital efficiency perspective)**

    a. Origination uses the wholesale model, using both local "feet-on-the-street" conventional forward mortgage originators and hands-on reverse mortgage originators. This is supplemented by our own field sales trainers.

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      i. From big data analysis and our pre-qualification algorithms, we can identify qualified prospects down to the individual household level.

          1. Prospects' homes and neighborhood trends are supplemented by credit qualification and debt analysis.

          2. These are provided to originators for conversion.

      ii. Targeted conventional mortgage originators have co-dependent relationships with realtors who know the neighborhood markets.

          1. Conventional originator Nexera Holdings, was founded and is staffed with originators from our Chairman's successful companies, Headlands Mortgage and GreenPoint.

          2. Impac Mortgage, based in Irvine CA, was refinanced by principals from Headlands and GreenPoint Mortgage.

          3. NatEquity's CEO has interviewed many of these originators who need this product line to fill an open space in the products they offer.

      iii. Senior Funding Associates, a leading California reverse mortgage wholesale network, was started by one of NatEquity CEO's top sales people from Transamerica HomeFirst.

          1. Their wholesalers need this product to satisfy their largely up-market client base.

          2. Senior Funding and a large Sacramento based HECM reverse mortgage originator have existing data bases of homeowners anxious for a reverse mortgage type product, but who's homes are way above the FHA/HECM upper $635,250 home value limit.

      iv. NatEquity has had unlimited use of the FirstAmerican DataTree large residential single family multi-source database. Testing and use of our proprietary search algorithms will allow us to do direct mail to targeted individual households.

  b. A warehouse or term line with strategic draws is a capital efficient way to operate.

      i. NatEquity's operating software projects cash needs and maximizes use of surplus cash managed by third party.

          1. Project cash flow positive in 9-months.

      ii. Cash flow will be replaced, and the line paid by successive private placements.

3. **Question: Product risk (reverse mortgage / morbidity/mortality, origination practices)**

  a. The HUD Home Equity Conversion Mortgage (HECM) has met its goal of addressing the needs of the seniors' population at the $317,000 average U.S. home value. For multiple reasons, our product addresses those needs significantly better and extends to higher valued home. NatEquity does not compete with the HECM program, but serves an educated high FMV segment of the market not served by HUD. HECM short-comings address lessons of what to not do:

      i. HUD took years to adjust the HECM program to correct abuses of seniors by bad actor boiler room originators.

      ii. HUD does not "yet" require mortality underwriting but uses mortality tables not suited to the market.

          1. This creates "headline tail risk" because home equity is exhausted before many of the seniors are ready to move out. These seniors use up their equity and allow homes to decay.

2. HECM has had poor product design, like allowing the exclusion of a spouse/future widow to boost lump sum or monthly payments. This prompted a rash of high visibility foreclosures HUD was slow to correct.

iii. Only recently has HUD started requiring originators to do HUD mandated income qualification and hands-on home inspections.

iv. HUD recently introduced a "put" back to originators when HECMs are fraudulent, improperly serviced or where securitizers foreclose without proper cause.

b. NatEquity has 25-years of studying and learning from those lessons.

i. NatEquity originations are on site reviews/conversations with disclosures, not "never meet um" boiler rooms.

1. NatEquity's *consultative sell* brings income qualification and disclosures perfected in other regulated longevity product markets.

2. NatEquity will not make large lump sum advances to seniors to deprive them of follow-on monthly income.

3. Required NatEquity housing counselor interviews at origination provide another layer of origination disclosure and homeowner education.

4. NatEquity's operating model requires quarterly person-to-person homeowner contact and annual in-home third-party inspections.

5. NatEquity's outside legal counsel is a consumer finance and mortgage specialist who has been counsel to our Chairman and CEO for 25-years.

ii. NatEquity options one half of the home, which means we "partner" with the homeowner and their family. All participants in the transaction are incentivized to maintain the value of the collateral, thus protecting both borrower and lender. This reduces the risks of deferred maintenance issues.

iii. NatEquity Option Contracts compensate for home price appreciation cycles by including an option price discount mortality factor. In the event of cyclical home price appreciation this option discount assured a modest profit on each contract.

iv. In exchange for this option price discount, NatEquity caps its appreciation sharing at 5% cumulative home price appreciation. The full value of appreciation in excess of 5% goes to the heirs at the time the home is sold.

v. Origination old loan LTVs do not exceed 20%.

vi. NatEquity has proprietary mortality-predictive software which assists us in selecting only those homeowners who meet our portfolio characteristics.

1. NatEquity pricing models tailor monthly payments to model predicted mortality/move out.

2. NatEquity's proprietary IP allows for accurate predictions of future portfolio cash flows[iii].

a. An affiliate company, working in a sister longevity asset class, purchased this predictive model in 2008 from Eric Stallard, an actuary at Duke's Medical School.

b. The IP has been revalidated to replicate original mortality predictability in peer reviewed published work in 2014[iv] and 2017[v].

vii. Inhouse portfolio servicing uses knowledgeable people supported by a comprehensive platform and a backup servicer with years of experience.

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c. NatEquity's low LTVs and comprehensive servicing platform protect collateral value for warehouse line provider.

d. For the initial 11-county coastal California market NatEquity will "cap" our participation in home value appreciation sharing at a cumulative 5% annual rate. All home appreciation above that level will go to the homeowner and their heirs. This is illustrated in the example below.

   i. Discussions with originators have convinced Management this will be a significant selling tool and have no effect on Company profitability beyond our projections.
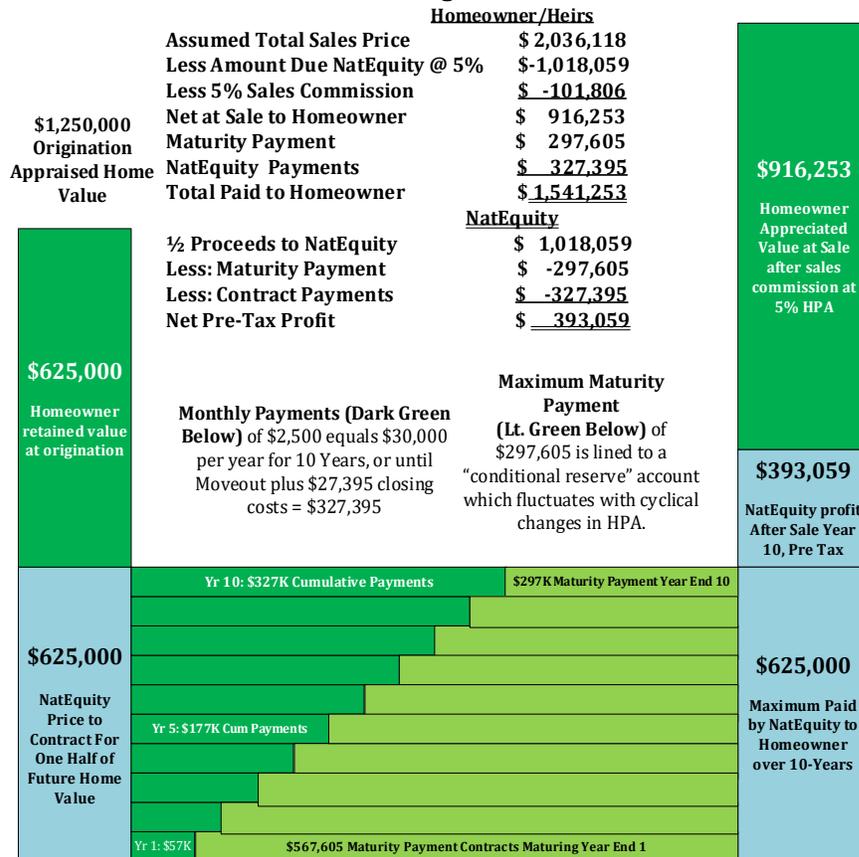
Example of a NatEquity Shared Appreciation Home Equity Option Contract

Assumes Maturity in year-10, 5% Annual Home Appreciation with NatEquity Sharing Capped at 5%

Female Age 78 at Contract Origination

$1.25 Million Origination Home Value

Summary at Sale, 5% Home Price Appreciation (HPA)
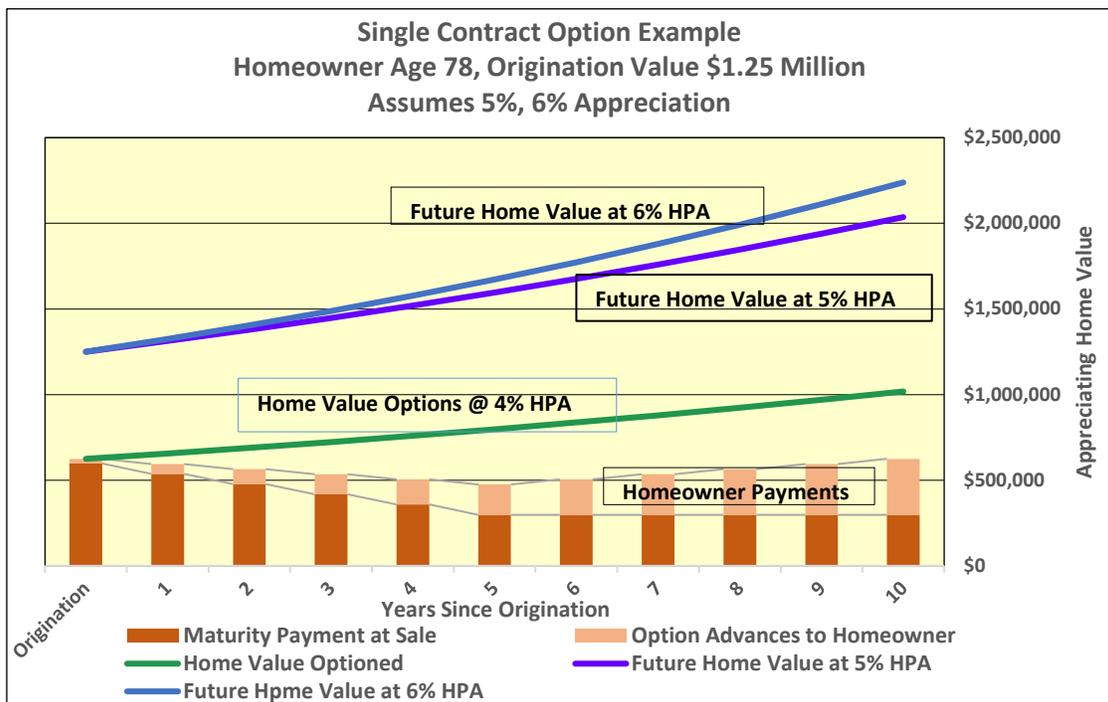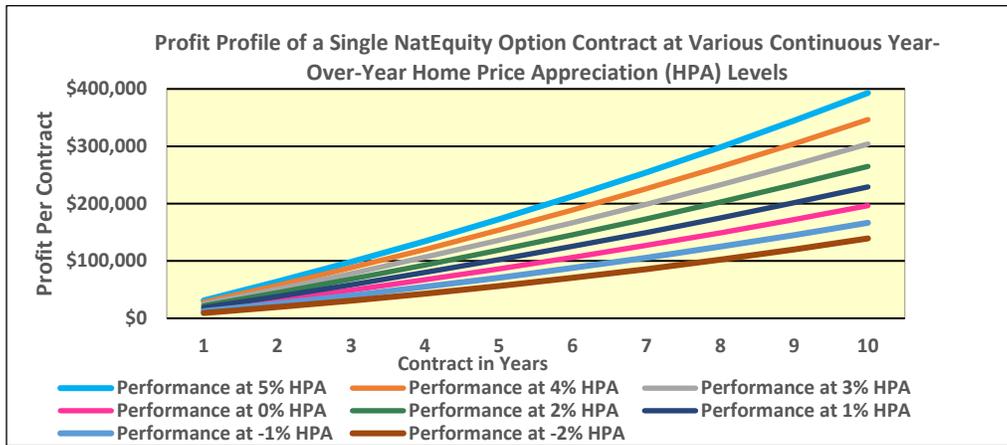**Sharing, Sale Year-End 10**

Homeowner/Heirs

Assumed Total Sales Price	$ 2,036,118
Less Amount Due NatEquity @ 5%	$-1,018,059
Less 5% Sales Commission	$ -101,806
Net at Sale to Homeowner	$ 916,253
Maturity Payment	$ 297,605
NatEquity Payments	$ 327,395
Total Paid to Homeowner	$1,541,253

NatEquity

½ Proceeds to NatEquity	$ 1,018,059
Less: Maturity Payment	$ -297,605
Less: Contract Payments	$ -327,395
Net Pre-Tax Profit	$ 393,059

$1,250,000 Origination Appraised Home Value

$625,000 Homeowner retained value at origination

$916,253 Homeowner Appreciated Value at Sale after sales commission at 5% HPA

Monthly Payments (Dark Green Below) of $2,500 equals $30,000 per year for 10 Years, or until Moveout plus $27,395 closing costs = $327,395

Maximum Maturity Payment (Lt. Green Below) of $297,605 is lined to a "conditional reserve" account which fluctuates with cyclical changes in HPA.

$393,059 NatEquity profit After Sale Year 10, Pre Tax

$625,000 NatEquity Price to Contract For One Half of Future Home Value

$625,000 Maximum Paid by NatEquity to Homeowner over 10-Years

Yr 10: $327K Cumulative Payments $297K Maturity Payment Year End 10

Yr 5: $177K Cum Payments

Yr 1: $57K $567,605 Maturity Payment Contracts Maturing Year End 1

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Single Contract Unit Economics Full Early Maturity Payment

5% HPA Scenario

Year-End	Cumulative Option Advances Homeowner	Unadjusted Full Option Exercise Payment	HPA Shortfall Adjustment at 5% HPA	Total Payments to Client	1/2 Sales Price Net of Commission	Total Received by Homeowner	Unit Profit to Funder
Origination	$27,395						
1	$57,395	$567,605	$0	$625,000	$590,625	$1,215,625	$31,250
2	$87,395	$537,605	$0	$625,000	$620,156	$1,245,156	$64,063
3	$117,395	$507,605	$0	$625,000	$651,164	$1,276,164	$98,516
4	$147,395	$477,605	$0	$625,000	$683,722	$1,308,722	$134,691
5	$177,395	$447,605	$0	$625,000	$717,908	$1,342,908	$172,676
6	$207,395	$417,605	$0	$625,000	$753,804	$1,378,804	$212,560
7	$237,395	$387,605	$0	$625,000	$791,494	$1,416,494	$254,438
8	$267,395	$357,605	$0	$625,000	$831,069	$1,456,069	$298,410
9	$297,395	$327,605	$0	$625,000	$872,622	$1,497,622	$344,580
10	$327,395	$297,605	$0	$625,000	$916,253	$1,541,253	$393,059

Single Contract Unit Economics with HPA Shortfall Adjusted Maturity Payments at 3% and 0% Constant HPA

		3% HPA Scenario						0% HPA Scenario					
Year-End	Cumulative Option Advances Homeowner	Unadjusted Full Option Exercise Payment	HPA Shortfall Adjustment at 3% HPA	Total Payments to Client	1/2 Sales Price Net of Commission	Total Received by Homeowner	Unit Profit to Funder	Unadjusted Full Option Exercise Payment	Shortfall Adjustment at 0% HPA	Total Payments to Client	1/2 Sales Price Net of Commission	Total Received by Homeowner	Unitl Profit to Funder
Origination	$27,395												
1	$57,395	$567,605	-$6,250	$618,750	$579,375	$1,198,125	$25,000	$567,605	-$15,625	$609,375	$562,500	$1,171,875	$15,625
2	$87,395	$537,605	-$13,000	$612,000	$596,756	$1,208,756	$51,063	$537,605	-$32,031	$592,969	$562,500	$1,155,469	$32,031
3	$117,395	$507,605	-$20,281	$604,719	$614,659	$1,219,378	$78,235	$507,605	-$49,258	$575,742	$562,500	$1,138,242	$49,258
4	$147,395	$477,605	-$28,124	$596,876	$633,099	$1,229,975	$106,567	$477,605	-$67,346	$557,654	$562,500	$1,120,154	$67,346
5	$177,395	$447,605	-$36,565	$588,435	$652,092	$1,240,527	$136,111	$447,605	-$86,338	$538,662	$562,500	$1,101,162	$86,338
6	$207,395	$417,605	-$45,639	$579,361	$671,654	$1,251,016	$166,921	$417,605	-$106,280	$518,720	$562,500	$1,081,220	$106,280
7	$237,395	$387,605	-$55,383	$569,617	$691,804	$1,261,421	$199,054	$387,605	-$127,219	$497,781	$562,500	$1,060,281	$127,219
8	$267,395	$357,605	-$65,839	$559,161	$712,558	$1,271,719	$232,570	$357,605	-$149,205	$475,795	$562,500	$1,038,295	$149,205
9	$297,395	$327,605	-$77,048	$547,952	$733,935	$1,281,886	$267,532	$327,605	-$172,290	$452,710	$562,500	$1,015,210	$172,290
10	$327,395	$297,605	-$89,056	$535,944	$755,953	$1,291,897	$304,003	$297,605	-$196,530	$428,470	$562,500	$990,970	$196,530

NatEquity Contract Cash Flows at 5% HPA, NatEquity Cap at 5%, Y/E 3 Sale

	NatEquity	Homeowner	External Costs	Total
Gross Home Sales Price	$723,516	$723,516		$1,447,031
Maturity Payment to Homeowner	-$507,605	$507,605		$0
Total Annual Payments to Homeowner	-$90,000	$90,000		$0
5% Sales Comission Paid By Homeowner		-$72,352	$72,352	$0
Initial Costs Advanced to Homeowner	-$27,395		$27,395	$0
Total	$98,516	$1,248,769	$99,747	$1,447,032

NatEquity Contract Cash Flows at 5% HPA, NatEquity Cap at 5%, Y/E 10 Sale

	NatEquity	Homeowner	External Costs	Total
Gross Home Sales Price	$1,018,059	$1,018,059		$2,036,118
Maturity Payment to Homeowner	-$297,605	$297,605		$0
Total Annual Payments to Homeowner	-$300,000	$300,000		$0
5% Sales Comission Paid By Homeowner		-$101,806	$101,806	$0
Initial Costs Advanced to Homeowner	-$27,395		$27,395	$0
Total	$393,059	$1,513,858	$129,201	$2,036,118

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Profit Profile of a Single NatEquity Option Contract at Various Continuous Year-Over-Year Home Price Appreciation (HPA) Levels

Single Contract Option Example
Homeowner Age 78, Origination Value $1.25 Million
Assumes 5%, 6% Appreciation

4. **Question: Startup business (albeit with previously successful management team)**

   a. NatEquity is the redesign of the successful Transamerica HomeFirst by an experienced management team who have previously worked together.

      i. Products are refinements of previously successful Transamerica HomeFirst products.

      ii. From scratch Mazonas grew Transamerica HomeFirst from an idea to a multi-billion-dollar jumbo private reverse mortgage company for Transamerica. In 1999, Transamerica sold our 15,000 shared home equity contract portfolios to a Wall Street bank for about $3 billion. That bank securitized the portfolios as SASCO-RMs with an A- rating from Moody's and Fitch. They sold the securitizations within a year for reportedly about $6 billion, a sweet $3 billion profit.

iii. Operating software platform is the third-generation evolution of a prior successful longevity platform for origination, underwriting, servicing and portfolio management used in parallel for life settlements.

iv. Management team has cross-functional experience in senior market marketing, origination, underwriting and portfolio management in both mortgages and life settlements.

v. GAAP accounting rules introduced in 2014 again favor private jumbo reverse mortgage type products, but only NatEquity's valuation IP to properly does these valuations[vi], which gives us first mover advantage and is a barrier to entry for all others.

    1. The ability to predict future portfolio cash flows allows us to use a lower risk adjusted discount rate to NPV cash flows.

vi. Management has deep and successful experience securitizing mortgage-type product to replenish cash flow and repay loans.

vii. NatEquity has designed or retooled other Transamerica HomeFirst conventional private jumbo reverse mortgage products for introduction to the rest of California and across the country.

viii. NatEquity has more than sufficient internally generated equity, existing IP, tools and pre-existing relationships to ramp up the business within 90 days of securing an adequate warehouse line.

Below is an extract out of NatEquity's Excel planning model showing the monthly draws on a sequential term loan or warehouse line where cash is replenished by a series of private placements. By month 48 free after-tax cash in the operating company would be sufficient to repay the loan if need be.

NatEquity $40 Million Term / Warehouse Line, Projected Results
Line Replenished by Portfolio Sales
Secondary Source of Repayment is NatEquity Free Cash

Legend:
- Securitization Sales
- Cumulative Net Warehouse Cash usage
- Reserves allocated to portfolios post sale
- Ops Co Cash balance
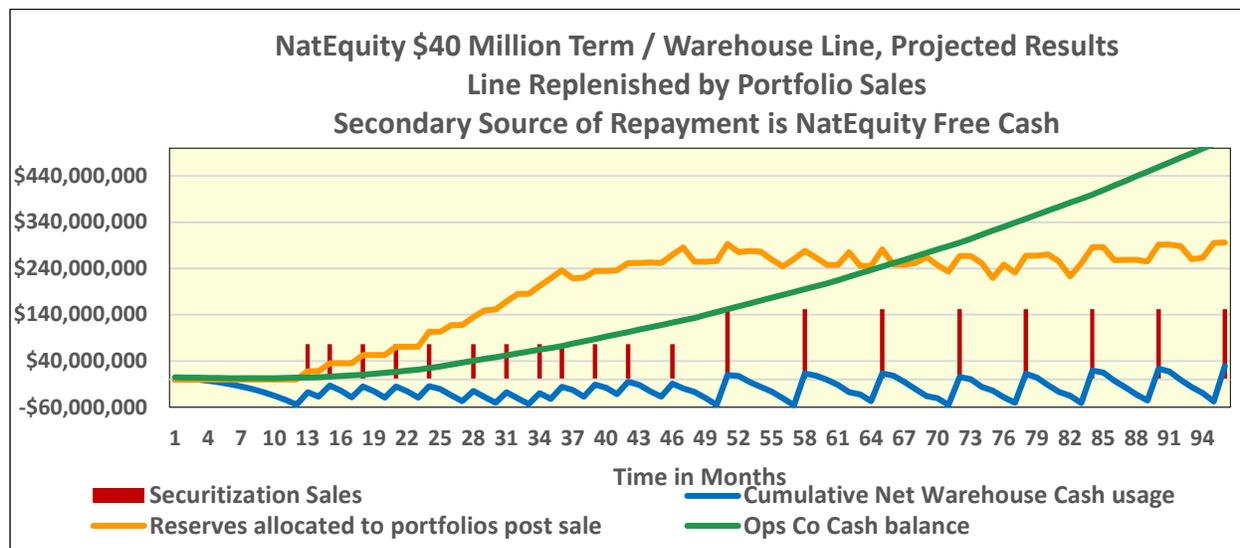
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[i] *A History of Policies and Forces Shaping California Teacher Credentialing*, 2011, https://www.ctc.ca.gov/docs/default-source/commission/files/ctc-history.pdf?sfvrsn=96050f5_0

[ii] Ibid, *A History of Policies* …

[iii] *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 Copies available upon request.

The Longevity Cost Calculator is a multi-algorithm driven computer model developed in the 1980s by an interdisciplinary group including Duke University Medical School actuary Eric Stallard. The original paper-based questionnaire includes 76 questions with as many as 7 different possible responses. The questions cover current and historic medical conditions, activities of daily living (ADL), instrumental activities of daily living (IADL), cognitive, body mass index (BMI) and other human characteristics. The questionnaire was first used in 1984 to assess 32,000 Medicare recipients in the National Long-term Care Survey. 20,000 subjects were assessed every consecutive five years to date of death. Observing data from consecutive assessments, Stallard developed and calibrated algorithms to cross-correlate more than 3.5 million possible responses in each assessment to develop probable trajectory curves of morbidity and mortality for each individual. After an assessment, the model generates a survival probability curve and values for each respondent. Also generated is the time each respondent should live independently and how long they will live institutionally before death. The later values have been used on the Social Security website in a cost of care calculator. Stallard's work was first peer reviewed and presented in 2005. The work was further peer reviewed and published in the North American Actuarial Journal in 2007[iii]. Whether measured by linear regression analysis, Chi-Square or a similar medical measurement of statistical accuracy, the model is generally credited with being more than 96% accurate in projecting the trajectory of morbidity and mortality at the individual person level.

To accommodate 76 questions with as many as seven possible responses, Stallard devised a four-category system called Grade of Membership (GoM I - IV). Almost no one is a pure type GoM I through IV, but rather a composite of partial scores falling into each category, but adding up to 1.00.

1. GoM I –   Generally healthy with lowest level of impairments.
2. GoM II – Poorest subjective health, largest number of medical conditions, non-institutionalized, low mortality.
3. GoM III – High mortality rates, few medical conditions, few impairments relatively good subjective health.
4. GoM IV – High mortality rates, high levels of physical and cognitive disability and institutionalization.

[iv] *A New Algorithm for Predicting Time to Disease Endpoints in Alzheimer's Disease Patients*, Qolamreza R. Razlighi, Eric Stallard, Jason Brandt, Deborah Blacker, Marilyn Albert, Nikolas Scarmeas, Bruce Kinosian, Anatoliy I. Yashin and Yaakov Stern, Journal of Alzheimer's Disease 38 (2014) 661-668 DOI 10.3233/JAD-131142 IOS Press.

[v] *Personalized predictive modeling for patients with Alzheimer's disease using an extension of Sullivan's life table model*, E. Stallard, B Kinosian and Y Stern, Alzheimer's Research & Therapy (2017) 9:75.

[vi] Ibid*, Longevity Risk in Fair Valuing* …