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Your mortgage loan: Fairly priced, … or not?

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Abstract

Comparing the loan products of different lenders may well be the most difficult part of buying a home. Although time and resources spent comparison shopping may save hundreds, even thousands of dollars, comparing one loan to another isn't as easy as just comparing contract interest rates; borrowers must shop interest rates, points (both discount and premiums), and fees. Unfortunately, the process is complicated by inadequate regulatory disclosures, inconsistencies among lenders, and legal loopholes ripe for abuse. We present a simple four-step procedure that borrowers or financial planners can utilize to accurately compare loan products. We document many of the abuses borrowers must be wary of, in particular, the widespread misuse of the yield spread premium, and show how our process prevails, to the borrower's benefit. Our process should be of interest to both academics teaching real estate, as well as practitioners counseling their clients. © 2008 Academy of Financial Services. All rights reserved.

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1. Introduction

Home ownership is invariably one of the largest and most important investments made by consumers. Alongside the difficult choice of choosing a home and negotiating its purchase price is a myriad of complicated decisions associated with financing the transaction. This process is seldom a one-time event. Most individuals move, requiring new financing, or refinance when market conditions warrant. Unfortunately, the entire process, from selecting

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a lender to signing closing documents, is an extremely complex task ill-understood by many consumers. We posit three reasons for this lack of understanding.

First, the mortgage loan landscape has changed dramatically over the past 25 years. Historically, consumers obtained mortgage money from regional banks and thrifts that acted as intermediaries between their depositors and borrowers. Fluctuations in the supply of mortgage money caused by the inflow and outflow of deposits prompted the federal government to form agencies such as the Federal National Mortgage Association (FNMA) and the Federal Home Loan Mortgage Corporation (FHLMC). By selling securities in the capital markets and using the proceeds to purchase pools of mortgage loans from financial intermediaries, these institutions act as conduits that link borrowers to the capital markets. The new lending environment, characterized by a separation of the mortgage loan functions, gave rise to a number of industry participants and loan products that did not historically exist. For example, mortgage brokers, largely absent before 1980, originated around 65% of the $2 trillion residential loan market in 2001 that are funded, held, and traded by investors in the form of mortgage-backed securities (Olson, 2002).

Second, the regulatory structure that surrounds and protects the mortgage transaction has failed to adequately evolve alongside the new lending environment (de la Torre & McClatchey, 2006). Of particular relevance are inadequacies in disclosures required by the Truth in Lending Act (TILA; P.L. 90–321; 15 USC §1601) and the Real Estate Settlement Procedures Act (RESPA; P.L. 93–533; 12 USC §2601). TILA was designed to protect consumers in credit transactions by requiring clear disclosure of key terms of the lending arrangement and all costs. Five items in particular are deemed so important that failure to give any one of them provides the borrower the right to rescind the transaction when a home is pledged as security. These are: the finance charge, annual percentage rate (APR), amount financed, total of payments, and schedule of payments. Borrowers frequently use the APR as a comparison metric in the loan selection phase; unfortunately, the disclosure falls far short of its intended purpose (McClatchey & de la Torre, 2006).

RESPA was enacted to help consumers become better shoppers for settlement services by eliminating kickbacks and referral fees and by requiring certain disclosures be given at various points in the transaction.[1] Two of these, the HUD-1 Settlement Statement and the Good Faith Estimate (GFE), serve as financial statements for the transaction by itemizing the funds collected and disbursed. Although the HUD-1, presented at closing, is the final statement for the loan transaction, the GFE provides a preliminary estimate of settlement charges at the beginning of the process. Unfortunately, neither statement is consumer-friendly nor has either been revised to accommodate changes in the marketplace. As reported by HUD (2002), "*excessive itemization enables originators to charge more than if the borrower could review and shop the total origination charges. The types of fees charged by loan originators, title agents and other service providers have multiplied in recent years making it steadily more difficult for borrowers to compare settlement costs.*" Regulatory overhaul is desperately needed as recognized by many industry participants (Lee & Hogarth, 1999b, 2000; Buch, Rhoda & Talaga, 2002) and as evidenced by recently stalled attempts by the Federal Reserve Board and HUD to simplify and improve consumer disclosures.[2] Although RESPA disclosures were comprehensively reviewed in 1998, they have not been

substantively revised in decades, leaving the problems identified in that review largely unaddressed.

Third, attention from academics on mortgage pricing issues *during the comparison shopping phase* is scant. Although ample descriptive information is available, most of it comes from company-sponsored programs or Websites, hardly unbiased and independent sources of information.[3] This does not suggest academic research is entirely absent the field of study; most consumer-level research has followed one of two strands. The first includes studies that examine the behavioral side of consumer shopping patterns. This line of research has identified the types of information used in the comparison phase, and how consumers search for this information (Lee & Hogarth, 1999a, 2000; Duncan, 1999; Hogarth & Hilgert, 2001; Baeck & DeVaney, 2003). Although survey data from these studies provides essential information for guiding policymaker's efforts to enhance consumer protection regulation, it reports what consumers do, rather than what consumers should do.

A second line of research examines the mechanics of various trade-offs consumers are frequently presented with. Examples include: the decision to refinance (Fortin, Michelson, Smith & Weaver, 2007; Arsan & Poindexter, 1993), the choice of loan term (Aulerich, 2004; Dhillion, Shilling & Sirmans, 1990; McCartney, 1989; Goff & Cox, 1998; Storms, 1992), the choice of fixed versus variable rate loans (Lino, 1992; Templeton, Main & Orris, 2002), and the decision to utilize discount points (McFlreath, Sirmans & Cash, 1988; Tyler Yang, 1992; Walden, 1992). These studies (implicitly) assume the borrower has completed the comparison shopping phase, selected a loan originator, and received fair and reasonable pricing options, which must evaluated. Unfortunately, abuses such as excessive compensation and overages do exist, as we detail shortly.

Overall, research-to-date has provided important insights for certain aspects of the mortgage loan transaction; however, it has fallen short of providing consumers with the specific knowledge and tools necessary to comparison shop multiple lenders. To this end, we discuss three facets of the lending process that collectively form the core knowledge lenders and loan officers have, and consumers need. We conclude with a four-step process and example that details how to effectively compare lender quotes, alongside the necessary cautions, caveats, and recommendations.

2. The flow of compensation

The borrower's primary contact throughout the lending process is the loan officer, or loan originator. Loan officers perform the prequalification, origination, and processing functions by finding customers, preparing their loan applications, and ordering necessary documents and reports. Loan officers may be employed by a mortgage lender or a mortgage broker.[4] In either case, a loan officer acts similar to an independent contractor in that they are compensated, oftentimes entirely, on a commission basis.

A mortgage lender makes the final loan approval decision (underwriting) and provides the money at closing (funding). In exchange, the lender receives a note verifying the borrower's debt and obligation to repay, as well as a lien on the property.[5] Most mortgage lenders have both a wholesale and a retail division. When transacting *directly* with the lender, consumers

Table 1 Loan price dimensions

1. Interest rate (%)	Lender
2. Fees expressed in dollars ($)	
a. Credit report, appraisal fee, inspection fee	3rd Parties
b. Title insurance, closing fee	Closing agent
c. Recording fee, taxes, stamps	Government
d. Processing fee	Loan officer
e. Underwriting fee	Lender
3. Fees expressed as a percentage of the loan amount (%)	
a. Independent of the contract interest rate	
i. Origination fee	Loan officer
b. Tied to the contract interest rate	
i. Discount points	Lender
ii. Yield spread premium	Loan officer

receive a retail price, which includes compensation for the loan officer, as an employee of the lender, to perform prequalification, origination, and processing functions in house.

A mortgage broker offers the loan products of multiple lenders. Generally, mortgage brokers do not lend their own money nor do they make the decision to extend credit; rather they perform only the prequalification, origination, and processing functions on the lender's behalf while the lender retains the underwriting and funding functions. A mortgage broker receives the lender's wholesale price to which they add a markup to compensate the loan officer as their employee. The consumer is then quoted a marked-up retail rate. This does not imply a more expensive product; in fact, borrowers may receive a better price when using a mortgage broker because they have access to several loan providers.

Mortgage loan prices have three dimensions: interest rate, fees expressed in dollars, and fees expressed a percentage. Table 1 depicts these dimensions alongside the various parties that receive each as compensation. Of particular relevance here is compensation received by the loan officer, which may come from several sources.

Loan officers, whether employed by lenders or brokers, are generally compensated for their services with direct fees, paid by the borrower at settlement. The traditional source of such compensation is an origination fee, which may be supplemented by fees for named services, such as document preparation fees, processing fees, or application fees. Although these types of compensation are reasonably transparent because they are itemized and disclosed on both the GFE and HUD-1, comparisons across lenders are not always straightforward. For example, Lender A may charge a 1% origination fee, a $500 processing fee and a $500 document preparation fee, whereas Lender B charges a 2% origination fee and nothing else. Different fees are given different names by different lenders, making a direct one-to-one comparison difficult, at best. Borrowers may pay direct compensation and other closing costs from their personal funds or by increasing the amount borrowed.

Less familiar is that loan officers may be paid by the lender, termed back-end compensation, in the form of a yield spread premium (also called rebate pricing, service release premium, yield differentials, rate participation fees, par-plus pricing, or premium pricing). Although a number of factors influence the size and use of the yield spread premium (YSP), the most significant is the loan's contract rate of interest. Specifically, most loan officers have some discretion to reduce or increase the lender's posted contract rate with the potential to

Table 2 Sample rate sheet

Contract rate	15-Day	30-Day	45-Day	60-Day
6.125	−2.375	−2.250	−2.000	−1.875
6.000	−2.000	−1.875	−1.625	−1.500
5.875	−1.625	−1.500	−1.250	−1.125
5.750	−1.125	−1.000	−0.750	−0.625
5.625	−0.625	−0.500	−0.250	−0.125
5.500	−0.125	0.000	0.250	0.375
5.375	0.500	0.625	.0875	1.000
5.250	1.125	1.250	1.500	1.625

Note. Day refers to the lock period. All entries are expressed as a percentage of the loan amount. Positive amounts represent payments by the borrower (discount points). Negative amounts represent payments by the lender (YSP).

share a portion of any additional profits made. As discussed shortly, this feature accounts for a majority of the confusion and overpricing evident in today's markets.

3. Rate sheet, discount points, and the yield spread premium

Mortgage interest rates are priced along a continuum. Loan officers, whether employed by a lender or mortgage broker, receive a rate sheet each day similar to the example in Table 2. The rate sheet provides updated rate-point combinations offered by lenders for different loan programs and is used by originators when providing quotes to borrowers.

The first column provides various contract interest rates the lender is willing to offer for a given set of conditions. As many as 20 adjustments, detailed elsewhere on the rate sheet, are made to the stated rates based on the borrower's specific situation (e.g., credit score, loan amount, property type, etc.). Next to each rate are the lender's required points, expressed as a percentage of the loan amount, for various lock-in periods. Rate/point combinations can be delineated into three broad categories: par, discount, and premium. We briefly review each, before turning to a discussion of potential abuses.

3.1. Par contract rate

The contract interest rate associated with zero points is termed the lender's par rate. As observed in Table 1, our lender's par rate for a 30-day lock period is 5.50%. Par represents the contract interest rate the lender is willing to offer with no premiums or discounts; that is, the lender is willing to fund a par rate loan at exactly 100 cents on the dollar. An originator that sells and delivers a par loan to the lender will receive their compensation entirely from direct named fees paid by the borrower at closing, such as an origination fee and/or a processing fee.

3.2. Discount contract rate

Discount points are expressed as positive values on the rate sheet. They are associated with contract interest rates *below* par and represent a one-time charge paid by the borrower

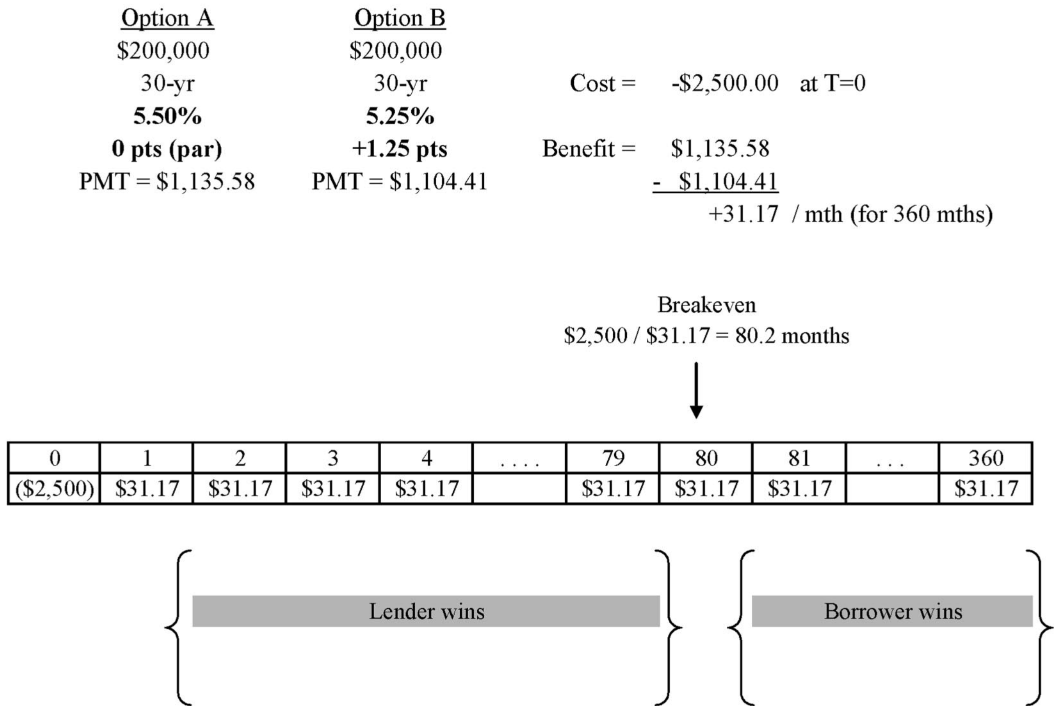

Fig. 1. Breakeven analysis for the payment of discount points.

to lower or buy down the contract interest rate. Essentially, discount points are pre-paid interest.

The literature is relatively well versed in illustrating a breakeven analysis for the discount point decision (McFlreath, Sirmans & Cash, 1988; Tyler Yang, 1992; Walden, 1992). In general, the borrower must plan to retain the loan long enough to recover the cost of buying down the contract interest rate with savings generated by lower monthly payments. Fig. 1 provides an example of the discount point decision for a borrower that would like a contract rate 0.25% below par. For simplicity, we ignore taxes and the time value of money in our computations.

To obtain a contract rate of 5.25%, the borrower must pay discount points equal to 1.25% of the loan amount at closing (see Table 2). On a $200K loan, this represents a cash outflow of $2,500 at $t = 0$. The benefit of the lower contract rate is a savings of $31.17 each month thereafter. We find it would take about 80 months to recover the cost of the buy-down. If the borrower expects to hold the loan more than 80 months, they would be better off with the below-par contract rate. Subject to market conditions, tax benefits, and so forth, discount points are a favorable financing tool for individuals who expect to hold the loan for a long period of time.

Similar to the case of a par loan, an originator that sells and delivers a discount loan will receive their compensation from direct named fees. The discount points, $2,500 in our example, are passed on to the lender to compensate them for accepting a loan with a below market interest rate.

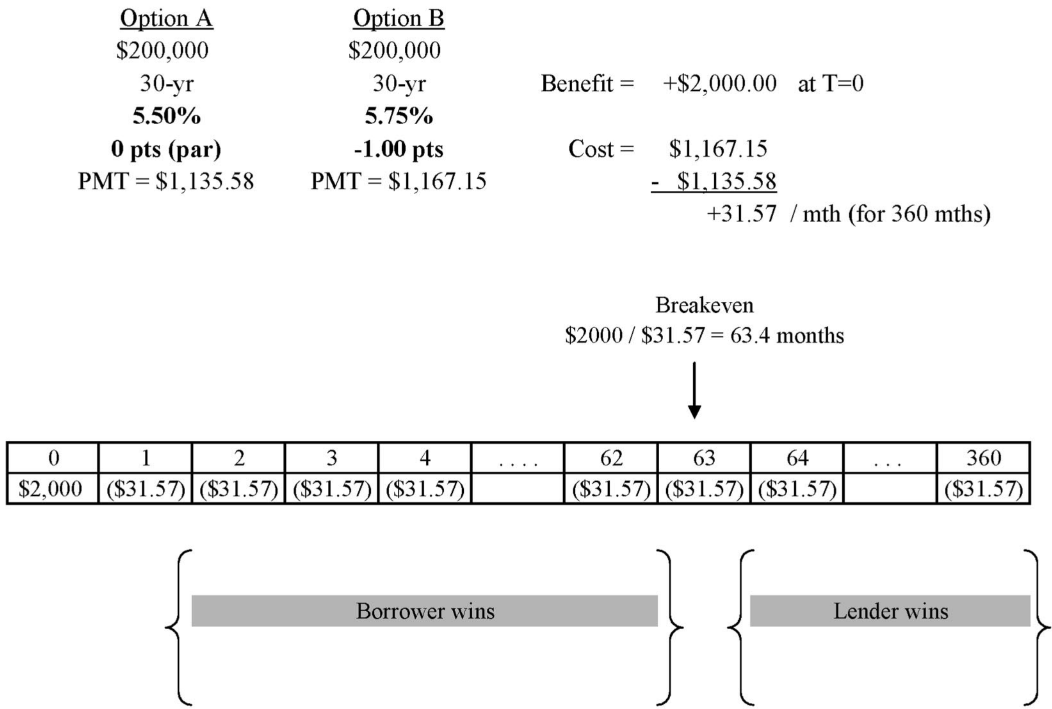

Fig. 2. Breakeven analysis for the yield spread premium credit.

3.3. Premium contract rate

Negative amounts on the rate sheet represent the YSP; they are associated with contract interest rates above par and represent money paid by the lender and credited at closing. The analysis of the YSP directly follows that of discount points albeit the decision rule reverses; the borrower should accept the YSP if their anticipated loan term is *less than* the breakeven period. Fig. 2 depicts the analysis for a borrower that would like a contract interest rate 0.25% above par.

In this example, the borrower would like to contract at 5.75%. The rate sheet, provided in Table 2, discloses a lender credit of 1% at closing, or $2,000 on a $200K loan at this rate. Breakeven analysis suggests this option would be optimal for borrowers that expect to hold the loan less than 63 months.

The YSP is a favorable financing option for borrowers that expect to hold the loan for a short period of time; that is, the up-front credit exceeds subsequent higher monthly payments in the near term. The YSP may also be a viable alternative for borrowers that are cash-short and at their maximum loan-to-value ratio as a means of affording the loan's up-front closing costs, regardless of their time horizon. Even though it would not be *optimal* for long-term borrowers (greater than 63 months in our example), the YSP credit may be the only way these individuals can afford the necessary $t = 0$ expenses of obtaining a mortgage.

The YSP is the essence of "zero cost" refinances widely prevalent in recent years. Of course, a no-cost transaction does not imply the lender and loan officer do not earn fair

compensation; rather the borrower is refinancing at a rate higher than par (albeit still below the borrower's original loan rate). The lender and loan officer then take their compensation on the back-end via the YSP credit. Although borrowers utilizing these products are undoubtedly better off in that they have reduced their monthly payment at no cost, *there may have been a better option*, depending on the borrower's anticipated loan horizon.

4. Abuses of discount points and YSP credits

Although seemingly simple as presented, there are a number of potential abuses surrounding the use of both discount points and the YSP that many consumers, academics, and practitioners are unaware of. These areas require careful attention in the comparison shopping phase on the part of the borrower or financial planner.

4.1. Discount points

From a borrower's perspective, the use of discount points seems reasonably transparent. The dollar amount of the fee is clearly noted on the GFE and HUD-1, and it is paid to obtain an equally obvious benefit; a reduction in the contract interest rate. The literature appears to support this notion in that some form of breakeven computation is generally the focal point of the discussion. A step back in the process, however, reveals a potential problem.

To illustrate, reconsider the rate sheet in Table 2 and breakeven analysis in Fig. 1. For a 30-day lock period, a borrower may choose to contract at the lender's par rate (5.50%) with no points or pay 1.25% in discount points and receive the lower contract rate of 5.25%. Although this tradeoff is clearly disclosed on the rate sheet, there is nothing to prohibit a loan officer from quoting the borrower a 5.25% loan rate accompanied by more discount points, say 1.50%. In other words, the borrower could unknowingly be paying more points than the lender requires if they have not reviewed the lender's rate sheet. In this case, the excess profit or overage (0.25% of the loan amount) will go to increase the loan officer's compensation or to increase the lender's profit. On a $200K loan, this would amount to an additional $500 at $t = 0$.[6,7]

4.2. Yield spread premium

It is easy to see the YSP is simply a mirror image to discount points; they lie on opposite ends of the loan-pricing continuum. Interestingly, a review of the literature found virtually *no mention* of the YSP or its analysis, despite the number of articles that analyze and discuss discount points. We posit two reasons for this.

The YSP is credited by the lender at closing; however, it is not legally required to be passed on or credited to the borrower. When used as intended, the loan officer, knowing the credit exists, will reduce (or eliminate, depending on the amount of the credit) direct borrower paid fees (e.g., origination fee, processing fee, etc.) and instead receive the YSP. In other words, the originator must *willingly* lower their front-end compensation to offset

what they will receive on the back-end from the lender (YSP) in order for the credit to pass through to the borrower.

Second, YSP disclosure requirements are extremely opaque, at best. From the borrower's perspective, the most transparent reporting requirements apply to mortgage brokers acting as pure intermediaries or mortgage brokers that use table funding. These intermediaries are required to disclose both direct (front-end) and indirect (back-end) fees on the GFE and HUD-1. Direct fees are treated similar to other settlement costs in that they are itemized and added to the borrower's total charges. However, indirect lender-paid fees are shown in the margin of the GFE and HUD-1 and denoted Paid Outside of Closing (P.O.C.). Alongside any other fees denoted as P.O.C., the amount of the YSP is *not* added to the borrower's total settlement costs.[8] Even the wording of the line item is ambiguous; it does not read as a lender credit to the borrower, rather it reads as a lender payment to the broker (YSP 0.5% to Broker Inc. $680 POC by Lender Inc.). As HUD (2002) notes: "this approach does not assure that YSPs are understood and credited to the borrower to reduce up front settlement costs."

The functional equivalent of a yield spread premium also presents itself in loans originated by mortgage bankers, portfolio lenders, and mortgage brokers that temporarily fund loans before selling them in the secondary market. However, these intermediaries are *not* required to disclose the terms or amount of the YSP on the GFE or the HUD-1. The credit is considered compensation received from the *subsequent* sale of the loan, regardless of how much time elapses from settlement to sale. It is disclosed only in the intermediary's internal record-keeping.[9] The end result is that a substantial segment of the mortgage industry is not required to disclose the YSP at all.

Although not all loans with YSPs reflect abusive practices, there is evidence that suggests the problem may be more widespread than many think. A recent survey conducted by the Justice & Integrity Project's National Mortgage Complaint center revealed the "top ten" mortgage abuses in 2005.[10] The number one abuse on their list; the yield spread premium. Evidence by Jackson and Berry (2002) provides empirical support for this assertion. Using a proprietary database, they examined 3,000 mortgages originated in the late 1990s. Their results indicate: (1) 85 to 90% of the transactions in the study involved a YSP; (2) in more than three-fourths of these the borrower had a loan less than the lender's maximum loan-to-value; hence, they did not *need* to finance closing costs with the YSP credit, they could have increased the amount borrowed; (3) mortgage brokers made an average of $1,046 more on loans with YSPs than they did on comparable loans unaffected by these practices; and (4) borrowers retain only 25 cents of benefit for each dollar paid in YSPs—the vast majority served only to increase the compensation of other parties to the transaction.

5. Utilizing the GFE as a comparison tool

As the final balance sheet or financial statement for the loan transaction, the HUD-1 sets forth all funds collected and disbursed by the buyer, seller, real estate agents, title company, broker, and lender during the course of the transaction. It is divided into 12 sections denoted A-L. Each section utilizes uniform line numbers called RESPA category numbers. Relevant to this discussion is Section L that details the transaction's settlement charges.

The GFE is a preliminary settlement statement that provides *estimates* of Section L charges likely to be incurred at closing. Although RESPA requires a GFE be provided to the borrower within three days of completing a loan application, it is oftentimes obtained and used before this by borrowers that are comparison shopping the rate/fee combinations of different lenders. Although entries on the GFE have the same line numbers as the HUD-1, the latter generally has more entries and is more detailed. A sample GFE is provided Appendix A.

Section L closing costs are grouped into six categories: loan-related fees (800s), lender items paid in advance (900s), reserves (1,000s), title charges (1,100s), government recording and transfer charges (1,200s), and additional charges (1,300s). These items are totaled near the end of the statement, followed by a breakdown of the loan's expected payment, loan amount, funds needed at closing, and so forth. When comparing lender GFEs, three of these areas should be *excluded*: 900; 1,000; and 1,200.

5.1. Exclude 900s: Items required by the lender to be paid in advance

Items in the 900 series, often called pre-paids, refer to costs that will be part of the borrower's regular monthly payment, but must be paid in advance. The most common line items are accrued interest, mortgage insurance premiums, and hazard insurance premiums.

Mortgage payments are normally made on the first day of each month. If the loan closes on any other day, the borrower must pay daily interest that will accrue between closing and the beginning of the next month when the first payment is made. To provide a quote, the lender must assume a closing date, and estimate pre-paid interest accordingly. Most lenders require the borrower to prepay the first year's mortgage insurance premium and hazard insurance premium at closing. At the time of providing a quote, the lender does not know which insurance company the borrower will select, nor do they know what the insurance premium will be; hence, they quote an estimate based on customary charges for that region.

Of course, the actual costs of accrued interest and pre-paid insurance, at closing, will be the same for all lenders, regardless of their estimated differences on the GFE. A comparison made on the basis of total settlement charges may mistakenly identify one lender as having the best loan package if that lender's estimates are lower. Incidentally, the potential disparity is not trivial; differences in accrued interest alone could easily exceed $1,000, depending on the lenders' assumptions.

5.2. Exclude 1,000s: Reserves deposited with the lender

In addition to prepayment of the first year's insurance premiums as reported in the 900 series, the borrower must also pay premiums into an account to ensure sufficient funds are available when the policy is renewed the following year. These amounts are commonly called escrow, impound, or trust accounts. Typically, 3 to 8 months of hazard insurance, 3 months of mortgage insurance, 3 to 8 months of real estate tax assessments, and 3 months of condominium or homeowner's association fees are required. These estimates are reported in the 1,000 series and, similar to estimates of pre-paids, should be excluded when comparing GFEs.

5.3. Exclude 1,200s: Government recording and transfer charges

Items in the 1,200 series reflect fees for legally recording the new deed and mortgage, and for government-imposed transfer stamps, as required in all transactions at closing. Again, any disparity among lender estimates will be absent at settlement, hence these fees should also be excluded.[11]

5.4. The GFE: A final caveat

To summarize, only RESPA categories 800, 1,100 and 1,300 should be considered when comparing GFEs; a comparison of total settlement charges could mistakenly select the highest cost lender. Although these steps, in theory, provide borrowers an accurate comparison metric, HUD itself notes: "*(t)hree decades of experience has shown that too often the estimates appearing on GFEs are significantly lower than the amount ultimately charged at settlement, are not made in good faith (e.g., a range of $0-$10,000), and do not provide meaningful guidance on the costs borrowers ultimately will face at settlement.*"[12] In some cases borrowers were assessed fees at closing that were completely left off the GFE.

RESPA rules require the GFE must be made in good faith, bear a reasonable relationship to charges the borrower is likely to pay at settlement, and be based upon experience in the locality of the mortgaged property (24 CFR 3500.7(c)(2)). The problem is that the rules themselves do not establish any clear tolerances for the relationship between initial estimates and final settlement costs even for the originator's own fees, which should be known (as contrasted with fees, e.g., of the title agent, which the originator does not control). Furthermore, there is no *legal* liability for errors on the GFE. RESPA provides no sanctions for inaccurate or incomplete GFEs, or even for the outright failure to provide one.[13] A borrower utilizing its information in good faith may select and lock with a lender, only to find significant omissions after it is too late. The narrowing of errors as the transaction moves toward closing would not be problematic if costs are as likely to decline as they are to increase. Unfortunately, that has not been the case.

Overall, the borrower's best line of defense is to be knowledgeable and thorough in their negotiations at the outset. Although the HUD-1 is usually the last document signed at closing, *the borrower has a legal right to request it one day before closing for review*. Borrowers should notify the originator they plan to exercise this right with the purpose of comparing quoted settlement costs on the GFE to their actual charges on the HUD-1. Lender costs should not increase.

6. A four-step process to comparison shopping

Having the option to select from a variety products, lenders, and rate/point combinations is positive in that it allows consumers the flexibility to choose those terms best for them. Unfortunately, the process is ill defined and complex, as evidenced by prior discussions. To facilitate comparisons, we have developed a set of guidelines that help borrowers prepare for the process and ensure they receive fair quotes.

Table 3 Optimal vs. constrained choice of YSP and discount points

Liquidity position	Anticipated loan term	Optimal financing	Options in light of financial constraints
Cash short	Short-term	Utilize YSP	Utilize YSP
Cash short	Long-term	Pay discount points	The borrower may need to use the YSP to pay closing costs although it is not optimal
Sufficient	Short-term	Utilize YSP	Utilize YSP
Sufficient	Long-term	Pay discount points	Pay discount points

6.1. Step 1: Preliminaries

Before contacting lenders, consumers should complete three tasks. First, borrowers should educate themselves on available mortgage products and the general level and trend of mortgage interest rates. Mortgage rates generally follow yields on Treasury notes and bonds and are easily accessed by a variety of web sites (e.g., www.bankrate.com). The borrower's personal situation, such as available liquidity, expected loan term, and projected income growth will strongly influence which loan program best meets their needs.

Second, the borrower should obtain a copy of their tri-merged credit report, and thoroughly review it for any errors. A recent report by the National Association of State Public Interest Research Groups found nearly 80% of all credit reports contain some type of error, 25% contain serious errors.[14] Any inaccuracies could cost thousands of dollars in extra interest over the term of the loan or even denial of credit. Further, borrowers should be aware of the factors that affect their credit score and take actions to minimize any negative effects. For example, job changes, drains on cash reserves, or major purchases like cars, furniture, or appliances should be avoided until after the loan is closed.

The final step is to *approximate* the desired position on the lender's rate sheet based on available liquidity and anticipated loan term (expected time in the home or time to refinance, whichever is less). Most borrowers will find themselves in one of four positions, as illustrated in Table 3.

The first two groups, both cash-short, may need to utilize the YSP credit to afford closing costs in light of their liquidity position. This position is optimal for the short-term borrower (i.e., their liquidity position does not hurt them), but not for a long-term borrower, albeit it may be their only choice for financing the transaction. Borrowers with sufficient liquidity should choose their position based on anticipated loan term. Short-term borrowers should position themselves on the premium side of the rate sheet, long-term borrowers on the discount side. An exact position at this stage is not necessary, as we illustrate shortly.

6.2. Step 2: Gather proper documentation

Step 2 involves gathering and organizing the proper documentation. To provide an accurate quote, the loan officer will require information on five areas. We recommend putting the packet in order and scanning it into a PDF format that can be emailed or printed, and provided to each lender.

1. APPLICATION
   a. Uniform residential loan application Form 1003 available at http://www.efanniemae.com/sf/formsdocs/forms/1003.jsp
2. INCOME
   a. First two pages of the borrower's 1040 income tax form for the prior two years
   b. W-2 or 1099 forms supporting tax returns for the prior two years
   c. Pay stubs for the prior three months
3. CREDIT
   a. Tri-merged credit report
4. ASSETS
   a. All asset statements (all pages, even if blank) for the prior three months; include checking, savings, IRA, securities, annuities, 401(k)
5. MISCELLANEOUS
   a. Divorce decree, verification of child support
   b. Bankruptcy filing paperwork and discharge documents
   c. Rental agreements and tax returns for rental properties held
   d. Green card, h-1, or l-1 visa for non-U.S. citizens
   e. Other supporting documents

6.3. Step 3: Request quotes

Upon completing Steps 1 and 2, the borrower should have a sense as to the level and direction of mortgage rates, the type of loan and features best for them, and their desired position on the rate sheet. At this stage, the borrower should narrow their list of potential originators and select 2 to 3 different contract interest rates they would like to receive quotes for. Each originator is then provided with the proper documentation, alongside the interest rates *the borrower has selected* and given a deadline (e.g., 3 p.m. that day) for returning a GFE at each contract interest rate. Because the contract interest rates are specified by the borrower, each originator is left to quote a price on the remaining dimensions (fees and points) based on where the borrower falls on their rate sheet and the profit they would like to earn.

6.4. Step 4: Ready to compare

To illustrate, consider the scenario set forth in Table 4. The borrower would like a $200K 30-year fixed rate loan. Mortgage rates have been hovering around 5.50% and our borrower's liquidity and anticipated time horizon suggest a near-par contract interest rate would be optimal. Three originators have been selected, provided the proper documentation, and asked to email GFEs for contract rates of 5.75%, 5.50%, and 5.25%. Having received each lender's quotes, all fees in RESPA categories 800, 1,100 and 1,300 are totaled. If a YSP credit is shown in the margin, it is *not included* in the computation of total fees. The YSP is not a direct credit to the borrower and hence does not represent a cash inflow. If the loan officer

Table 4 Lender fees and points with accompanying breakeven analysis

Contract rate		Lender A	Lender B	Lender C
Panel A: Lender fees & points				
5.75%	Fees:	$3,000	$2,750	$3,750
Pmt = $1,167.15	Points:	−1.000	−1.125	−1.125
5.50%	Fees:	$5,000	$4,250	$4,750
Pmt = $1,135.58	Points:	0.000	−0.375	−0.375
5.25%	Fees:	$7,000	$7,250	$7,900
Pmt = $1,104.41	Points:	1.000	1.125	1.125
Panel B: Breakeven in months				
5.75% → 5.50%	Breakeven = $1,500 / $31.57 = 47 months			
5.75% → 5.25%	Breakeven = $4,250 / $62.74 = 68 months			
5.50% → 5.25%	Breakeven = $2,750 / $30.87 = 89 months			

Note. Loan amount = $200,000, Lock-in period = 30 days.

intends to pass the credit along, some other fee (likely in the 800 series) will be reduced, so the YSP is (indirectly) reflected in the computation. At this point, the decision is quite straightforward; at any given contract interest rate, the originator with the lowest total fees is the best deal.

Panel A in Table 4 summarizes the results. At each contract rate, all lenders have the same monthly payment and the same loan payoff at any future point should the borrower move or refinance. In other words, the only difference among them is fees. We find Lender B has the lowest fees at contract rates of 5.75% and 5.50% whereas Lender A offers the best terms at 5.25%. We address selection of the best rate shortly.

For explanatory purposes, we include each lender's required points alongside their total fees in Panel A.[15] To illustrate how our process will flush out lenders with suboptimal products, as well as originators charging excessive compensation, begin with Lender A's offerings. Lender A's par contract rate is 5.50% (zero points). At this rate relevant GFE fees, which include the loan officer's compensation, total $5,000. Lender A also offers a 5.75% contract rate accompanied by a 1% YSP and a 5.25% contract rate accompanied by 1% in discount points. When converted into dollars, both the YSP credit and the discount points are equal to $2,000 (0.01*$200K). Lender A's loan officer has provided the borrower "fair" quotes in both instances. That is, fees at the 5.75% contract rate are exactly $2,000 lower than at the 5.50% contract rate, and fees at the 5.25% contract rate are exactly $2,000 higher than at the 5.50% contract rate. We caution this does not imply Lender A is not overcharging our borrower via excessive fees *at each contract rate*. Rather, our example only illustrates the YSP credit and discount point fees were not manipulated to create excess compensation.

Lender B offers more competitive rate/point combinations at both the 5.50% and 5.75% contract rates, as evidenced by larger YSP credits. In contrast, Lender B's discount points are higher than Lender A, indicating a substandard offering at 5.25%. Lender B's loan officer also passes along the full credit of the YSP, and does not overcharge our borrower in discount points. The change in GFE fees as one moves to either the higher or lower rate, correspond directly with the change in quoted points. Again, this only shows the loan officer is not manipulating the point structure; compensation could be excessive at all three contract rates.

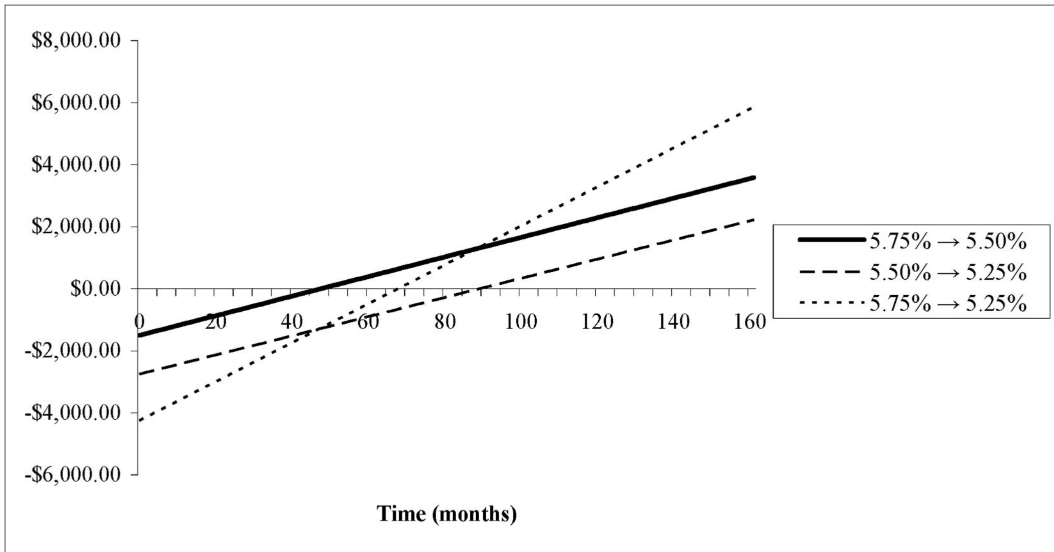

Fig. 3. Cumulative cash flow savings from the move to a lower contract interest rate.

Lender C offers the same rate/point combinations as Lender B but quotes at least $500 more in fees each rate. This could signal the lender's internal costs are higher; thus, they cannot be as competitive, or it may be the loan officer for Lender C would like to make at least 0.5% or $500 more in compensation on the transaction, relative to other loan officers. We can, however, determine the loan officer for Lender C is taking part of the YSP as additional compensation, and is overcharging the borrower in discount points. In the premium case, the YSP credit changes by 75 basis points as one moves from 5.50% to 5.75%, which should result in a $1,500 credit; however, fees decrease by only $1,000. In the discount case, points increase by 1.5%, or $3,000 on a $200K loan. In contrast, fees increase by $3,150. Overall, we see even if we were not provided access to the rate sheets, our method assures Lender C, with higher costs, is not selected.

Returning to our example, the borrower is left to select the best of the three contract rates. Table 4, Panel B provides the breakeven in months for three possible scenarios: a move from 5.75% to 5.50% (breakeven = 47 months), a move from 5.75% to 5.25% (breakeven = 68 months), and a move from 5.50% to 5.25% (breakeven = 89 months). To facilitate comparison, we graph the cumulative cash flows over time for each breakeven scenario in Fig. 3. The y-axis intercept characterizes the t = 0 costs (e.g., increase in GFE fees) associated with the move to the lower contract rate. As savings are realized each month from the lower interest rate, cumulative cash flows slowly increase. Each line crosses the x-axis at the breakeven point representing recovery of initial costs.

Below 47 months, the cumulative cash flows for all three options, which represent incremental cash flows obtained by the move to a lower rate, are negative. In other words, if our borrower's anticipated loan horizon is less than 47 months, they would be best suited by no move, and should contract at the highest interest rate (5.75%). Between months 47 and 89, the contract rate with the greatest cumulative savings is 5.50%; after 89 months, 5.25%

dominates. To summarize, our borrower should select a contract rate of 5.75% with Lender B for loan horizons between 0 and 47 months, 5.50% from Lender B for loan horizons between 47 and 89 months, and 5.25% from Lender A for loan horizons greater than 89 months.

7. Cautions, caveats, and red flags

According to Secretary of HUD, homeowners in the U.S. will overpay $16 billion dollars for their mortgage loans in 2007. Lender comparison is difficult, at best; different lenders charge different fees by different names. Although GFE estimates are supposed to be made in good faith and bear a reasonable relationship to charges at settlement, no clear tolerances, legal liability, or sanctions for errors are established by RESPA. To combat disclosure shortfalls, borrowers should: (1) inform the loan officer they plan to exercise their right to request the HUD-1 Settlement Statement one day before closing and expect lender-controlled fees to remain unchanged from their estimates on the GFE; (2) compare only lender-related fees on the GFE when comparison shopping (RESPA categories 800, 1,100 and 1,300), not total settlement charges; (3) inform each originator quotes are being received and compared from several originators; and (4) continue to shop and compare quotes until the rate has been locked, today's low cost provider may be tomorrow's high cost provider. Interestingly, we have found some loan officers willingly reduce their compensation below that considered fair and reasonable when put in a competitive situation to acquire the borrower's business.

Although competition among lenders helps combat excessive abuses, we also recommend careful examination (and open discussion) of the loan officer's compensation. The borrower has the right to ask each originator for a detailed breakdown of their total compensation (front-end and back-end), at each contract interest rate requested. As a rule of thumb, the loan officer's compensation should be targeted to 1% to 3% of the loan amount, depending on the complexity of the transaction, the amount borrowed, and marketplace conditions. While 1.5% of the loan amount is fair, 1% is better. Recall most mortgage brokers must disclose the YSP credit on the GFE and HUD-1; however, a select group of brokers and all lenders are exempt. Oftentimes, it can be difficult to ascertain, from the borrower's perspective, what the true compensation really is.

We conclude with a list of red flags that should bring caution to borrowers or financial planners as they begin to narrow their list of originators. That is, borrowers should be wary of a loan officer that:

- Seems uncomfortable when discussing their total compensation and/or the YSP credit. The borrower has the right to be informed of the compensation they are providing each party to the transaction.
- Quotes a rate without gathering personal information. Up to 20 borrower-specific factors affect the contract rate of interest hence an accurate quote cannot be provided until all pertinent information is received.
- Quotes a rate without discussing the borrower's present situation and plans for the future. How can an originator know if a borrower is best suited for a discount, par, or

premium contract rate unless they know the borrower's liquidity position and anticipated loan term?

- Quotes a single contract interest rate. All originators work from lender rate sheets which include a continuum of contract interest rates. The borrower should be provided with several options, and allowed to choose the rate best for them.
- Quotes low figures for pre-paids, government taxes, and escrow requirements. Low quotes across the board in these areas could signal the loan officer is trying to manipulate total settlement charges to make their offer more attractive.
- Promotes a loan with a prepayment penalty. These loans generally carry a larger YSP credit, which may be taken as additional compensation.

8. Conclusion

The real estate lending industry has grown substantially, approaching $4 trillion in outstanding loan balances. Total real estate debt in the country is the largest in the world, second only to the United States government.[16] Unfortunately, some consumers choose not to purchase homes because the process of buying and financing a home is unnecessarily complicated. Others refrain because they do not have the cash for a down payment, a large part of which is settlement costs. For those that do embark on the mortgage process, many find it far too confusing and too costly (Weicher, 2004). Unfortunately, comparing one mortgage to another isn't as easy as just comparing rates. Borrowers need to shop all three components of a loan's price; rates, points, and fees.

Although information related to mortgage loans is available as required under TILA-RESPA, researchers have found that consumers often lack understanding of disclosed information in the mortgage loan market. This lack of understanding stems from the complexity of financial information, timing of required disclosures, and the proliferation of product choices and intermediaries. Because the details of transactions may differ substantially, the disclosed information may not always permit easy comparisons. A basic understanding of this process and the intermediaries involved is the first step in sorting through the myriad of fees. Until policymakers find a way to clean up the process and provide greater transparency at the consumer level, borrowers must do their homework, compare, negotiate, and self-educate.

Notes

1. Within three days of application, lenders must provide a: (1) Good-Faith Estimate of settlement costs that lists the charges the buyer is likely to pay at settlement; (2) Special Information Booklet explaining the settlement services and settlement statement; and (3) Mortgage Servicing Disclosure Statement that discloses to the borrower whether the lender intends to service the loan or transfer it to another lender. At settlement, RESPA requires the HUD-1 Settlement Statement and the Initial Escrow Statement be provided. RESPA also requires an Affiliated Business Ar-

rangement Disclosure at or before the time of referral if a settlement service provider refers the consumer to a provider with whom the referring party has an ownership or other beneficial interest. After settlement, RESPA requires loan servicers to deliver an Annual Escrow Statement. A Servicing Transfer Statement is required if the loan servicer sells or assigns the servicing rights to a borrower's loan to another loan servicer.

2. See HUD's Proposed Rule 24 CFR Part 3500, Real Estate Settlement Procedures Act (RESPA); Simplifying and Improving the Process of Obtaining Mortgages to Reduce Settlement Costs to Consumers, Office of the Assistant Secretary for Housing-Federal Housing Commissioner, HUD at http://www.sba.gov/advo/laws/comments/dhud02_1028.txt and the FTC Staff Report on Mortgage Broker Compensation Disclosures at http://www.ftc.gov/opa/2004/02/mortgagerpt.htm.
3. Black, Boehm, & DeGennaro (2001) note the deficiency of empirical studies is not because of a lack of interest, rather it is because of the proprietary nature of the data required to conduct such analyses.
4. A 1999 survey by the Mortgage Bankers Association of America (MBA) found massive confusion on the part of consumers as to whether they had dealt with a mortgage lender or a mortgage broker (Lee & Hogarth, 2000).
5. There are two types of mortgage lenders. A mortgage banker, the largest in terms of numbers and asset size, temporarily funds loans by borrowing from banks or by selling short-term notes. After closing the originated loans are sold in the secondary market (e.g. FNMA or FHLMC), although some institutions may elect to retain the loan's servicing rights. Portfolio lenders refer to depository institutions such as commercial banks, savings banks, credit unions, and savings and loans. These institutions use funds obtained from savings accounts, checking accounts, CDs, etc. to fund mortgage loans. Portfolio lenders may opt to hold the loans in their portfolio or sell them in the secondary market.
6. We have seen such a case. Interestingly, the GFE reported the payment of discount points *and* a lender-paid YSP credit. In other words, the borrower was paying *more* than the required amount for the below-par contract rate; hence, the lender provided a credit of the excess at closing. This excess was taken by the loan officer and/or lender as additional compensation. Black, Boehm, & DeGennaro (2001) find the overages (e.g., YSP) in their study were divided 50–50 between the loan officer and the lender.
7. As a practical matter, we have found some, but not all, originators are willing to share their rate sheet with the borrower when asked.
8. Examples of other fees that may be denoted POC are application fees, fees for obtaining the credit report, and the appraisal fee. These items are denoted POC if they were paid by the borrower before settlement.
9. Some smaller mortgage brokers have reorganized as "net branches" of lenders. Legally, the broker becomes an employee of the lender, but operates as if it were an independent firm. As an "employee" of the lender, the broker is able to avoid disclosing any YSP received.
10. http://www.prwebdirect.com/releases/2005/5/prweb239591.htm and featured in the

May 2005 edition of Money Magazine. Other abuses included poorly disclosed prepayment penalties, lender up-charges of third party fees, referrals to high-cost third parties, and failure to deliver a GFE.

11. Although government fees are non-negotiable, they may be shifted to the seller of the property; however, this must be requested at the time the time the offer is made to purchase the property (it must be part of the purchase contract).
12. HUD, 24 CFR Part 3500, Real Estate Settlement Procedures Act (RESPA), Simplifying and Improving the Process of Obtaining Mortgages To Reduce Settlement Costs to Consumers; Proposed Rule, http://www.sba.gov/advo/laws/comments/dhud02_1028.txt.
13. Bank and other regulators do enforce these requirements for their regulated institutions; however, other types of originators are not subject to such enforcement.
14. http://www.cbsnews.com/stories/2004/10/12/earlyshow/contributors/raymartin/main648887.shtml.
15. A lender's rate sheet (rate-point offerings) is not generally made available to the borrower, although some loan officers will provide it at the borrower's request.
16. http://www.austinhomeloan.com/overview/indview.html.

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