

Weaknesses of Housing Affordability Indices Used by Practitioners

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The subprime mortgage and foreclosure meltdown of 2007-2008 emphasized the need for a re-conceptualization of measures of an individual household's ability to afford housing. A clear link needs to be established between what a household can afford and the loan amount for which a household qualifies. This paper provides a conceptual review of three commonly used housing affordability indices in the United States: (a) the Department of Housing and Urban Development (HUD) Affordability Index for homeowners and renters; (b) the National Low Income Housing Coalition Affordability Index for renters, also known as Housing Wage; and (c) the National Association of Realtors Affordability Index for homeowners. The review of measures showed a lack of ability to easily adapt housing affordability measures to individual households. Discussions on issues related to housing affordability measures are presented, including market affordability verses individual affordability, the residual income approach, and housing affordability and transportation costs. The authors recommend that housing practitioners utilize an adapted residual income approach that considers household size, geographic location, transportation, and non-housing related expenses, rather than standard affordability measures or qualifying guidelines. The authors also recommend that researchers and policy makers review qualifying ratios and make appropriate changes to better determine an individual household's ability to afford housing.

Key Words: housing affordability, housing affordability indices, housing policy

Introduction

Housing affordability is a prominent concern in the United States for multiple reasons. Since around 2007, there has been a decline in house prices, and in some parts of the country a significant depreciation has occurred. There has also been a continued emphasis placed on becoming a homeowner by the United States government with multiple programs being established to help low-income households obtain homeownership (Schwartz, 2006). Qualifying guidelines for mortgages became more lenient for a time, contributing to the mortgage crisis. In addition, lenders approved borrowers regardless of the borrowers' ability to pay the loan, and many of those loans were loaded with predatory features (Rushton, 2007). At the same time, the nation as a whole experienced a negative savings rate (Bureau of Economic Analysis, 2008) and increased levels of debt—a notorious combination that caused concerns for housing instability.

Multiple types of housing affordability measures exist. Some approaches compare median housing prices and median household income to define the affordability of housing in communities. This article focuses on measures that account for an individual household's ability to afford a home. A variety of housing affordability approaches exist, e.g, the hedonic approach crafted by economists using several variables to be calculated which are not available to practitioners. On the other hand, the ratio approach is easily computed but is not as accurate. The indices chosen for this paper are widely used by practitioners, non-profit organizations, lenders, counseling agencies, city council members, and legislators. This paper points out the weaknesses and strengths of three different measures. Due to the ease of calculation of these commonly used variables, practitioners need to be aware of the caveats of each and bring up these issues when counseling and educating clients.

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Housing Affordability Measures

Multiple indices for measuring housing affordability exist (Belsky, Goodman, & Drew, 2005; Bogdon & Can, 1997; Combs, Combs, & Ziebarth, 1994; Linneman & Megbolugbe, 1992; O'Dell, Smith, & White, 2004; Robinson, Scobie, & Hallinan, 2006; Stone, 1993; U.S. Department of Housing and Urban Development (HUD), 2006; Van Vliet, 1998; Yip & Lau, 2002). Despite this plethora of measures, Linneman and Megbolugbe (1992) stated that "talk of housing affordability is plentiful, but a precise definition of housing affordability is at best ambiguous" (p. 371). Some measures of housing affordability are based on whether or not a household can qualify for a mortgage (Linneman & Megbolugbe, 1992) because without a mortgage as leverage, most households could not purchase a house. Measuring housing affordability based on the ability to qualify for a loan is often criticized because of the leniency of mortgage qualifying standards in recent years, and because "questionable" loans are available to virtually all types of borrowers, whether or not they actually meet standard qualifications (Eakes, 2007).

The most general measure of housing affordability is simply the relationship between housing costs and income. Robinson, Scobie, & Hallinan stated "Affordability can generally be thought of as a continuum... [A]t one end is easily affordable, at the other definitely not affordable. But at which point do we say that something that was affordable now becomes unaffordable?" (2006, p. 2). Bourassa

stated that housing affordability is a "very slippery thing to try to grasp" (1996, p. 1870), in part because "different definitions yield different estimates of the magnitude and distribution of the [housing affordability] problem" (p. 1868).

Twelve housing affordability indices for both renters and homeowners are reported in Table 1. The three indices discussed in this paper are: (a) The Department of Housing and Urban Development (HUD) Affordability Index for homeowners and renters, (b) The National Low Income Housing Coalition Affordability Index for renters, also known as Housing Wage, and (c) The National Association of Realtors Affordability Index for homeowners. Based on an extensive literature review, the three measures chosen for this paper, HUD, NAR, and the Housing Wage, are most commonly used by counseling practitioners, industry practitioners, and local policy decision makers (see Table 2). To represent a variety of housing industries, it was decided to have at least one index created by the real estate industry (representing the industry standard), one from a consumer advocacy group (civic group standard), and one from the government (legislative standards). This decision was based on the assumption that different housing affordability measures yield different results depending on the constituencies behind the measure. Each index will be defined or described followed with an overview of who uses each one and for what reasons and a discussion of respective strengths and weaknesses.

Table 1. List of Housing Affordability Indices Based on Literature Review

Housing affordability index	Proponent of index	Description	References
NAR Housing Affordability Index	National Association of Realtors	Ability of median-income family to buy median-priced home	Linneman & Megbolugbe (1992), NAR (n.d.), U.S. Dept. of HUD (2006)
Variant Housing Affordability Index	Local Realtors	Percentage of households that can afford to purchase a median-priced home	U.S. Dept. of HUD (2006)
NAHB-Wells Fargo Housing Opportunity Index	National Association of Home Builders and Wells Fargo	Percentage of homes affordable to median-income family	U.S. Dept. of HUD (2006)

Table 1. List of Housing Affordability Indices Based on Literature Review continued

Housing affordability index	Proponent of index	Description	References
HUD Guideline	HUD	Housing affordable if no more than 30% of gross monthly income spent on total housing costs	Bogdon & Can (1997), Hulchanski (1995), O'Dell, Smith, & White (2004), U.S. Dept. of HUD (2006)
Housing Wage	National Low-Income Housing Coalition	The hourly wage needed to afford the Fair Market Rent in a given area	NLIHC (n.d.)
HR 3899 Definition of Housing Affordability	American Homeownership Act of 1998	Similar to NAHB except uses 150% of median income rather than only median income	U.S. Dept. of HUD (2006)
Affordability Measure by MSA	EPA	Used to measure change in affordability due to increase in compliance costs associated with effluent regulation	U.S Dept. of HUD (2006)
Price Index of New One-Family Sold	US Bureau of the Census	Measures changes over time in the sale price of new single-family houses with the same characteristics	Van Vliet (1998)
Federal Home Loan Bank of Atlanta Lower-Income Housing Affordability Index		Ability of lower-income households to qualify for mortgage on a modestly-priced home	Linneman & Megbolugbe (1992)
Shelter Poverty	Stone (1993)	Maximum amount available for housing depends on household size and income	Bogdon & Can (1997), Stone (1993)
Quality Adjusted Measure		Compute number of households for which 30% would not cover cost of housing	Bogdon & Can (1997)
Supply of Affordable Housing Units		Share of vacancy rates for units deemed affordable according to the Fair Market Rent	Bogdon & Can (1997)
Housing Affordability Mismatch		Ratio of housing units potentially affordable to households of a certain income to number of households in that income range	Bogdon & Can (1997)

Commonly Used Measures of Housing Affordability

U.S. Department of Housing and Urban Development Measure

The United States Department of Housing and Urban Development (HUD) uses a simple percentage-of-income measure to define housing affordability. It states that a household spending more than 30% of its gross annual income on total housing costs, including principal and interest payments on the mortgage, property taxes, utilities (which consist of electricity, gas, water, and sewer), and insurance, has a housing cost burden. If a household spends more than 50% of its gross annual income on housing, the household has a severe housing cost burden. According to the HUD measure, total housing costs at or below 30% of gross annual income are affordable (Belsky, Goodman, & Drew, 2005). HUD's measure is the most widely used and the most conventional measure of housing affordability. It is often considered the definition of housing affordability (Linneman & Megbolugbe, 1992) and has shaped views of who has affordability problems, the severity of problems, and the extent of the problems (Belsky, Goodman, & Drew, 2005).

Users of HUD Measure. The HUD measure is the legislative standard used to qualify applicants for housing assistance. It is used in the administration of rental housing subsidies, such as the Section 8 housing vouchers (Bogdon & Can, 1997). Also, the measure is utilized as a rationing method to allocate subsidy dollars (Hulchanski, 1995).

The HUD ratio is "consistent with lender ratios for qualifying for a mortgage loan" (O'Dell, Smith, & White, 2004, p. 32). It is used by housing counselors and educators to assess how much first-time homebuyer clients can afford. In addition to qualifying ratios, it is often used to describe housing markets and affordability issues in local housing market analyses. The measure is not only used in the United States but also internationally (Robinson, Scobie, & Hallinan, 2006).

Strengths of HUD Measure. The HUD measure is easy to compute and simple to comprehend (Belsky, Goodman, & Drew, 2005; Bogdon & Can, 1997; Hulchanski, 1995; O'Dell, Smith, & White, 2004). The data needed for this measure are often readily available from a few different sources (Bogdon & Can, 1997), including the U.S. Census Bureau, the American Housing Survey, and others compiled and/or used by HUD and other entities. These data are broken down into geographic areas such as states,

counties, metropolitan areas, or census tracts. As the measure is reported in ratio form, it can be compared over time (Bogdon & Can, 1997; Stone, 2006). The ratio is a useful way to describe what households spend on housing at given points in time, providing a way to analyze trends that can lead to developing concepts and testing hypotheses (Hulchanski, 1995).

Weaknesses of HUD Measure. As with all measures, the HUD ratio is criticized for multiple reasons. The ratio fails to take into consideration a cost of living variable, a variable that would account for the cost differences in food, shelter, transportation, and other living expenses from one housing market to another (O'Dell, Smith, & White, 2004). A cost of living variable can be a vital variable considering the differences in housing markets across the country. Also, the HUD ratio does not control for quality of housing over time (Bogdon & Can, 1997; Linneman & Megbolugbe, 1992) or for differences that may exist in household size and location (Belsky, Goodman, & Drew, 2005; Bogdon & Can, 1997; Linneman & Megbolugbe, 1992; O'Dell, Smith, & White, 2004).

Although the assumption is often made that higher income equals greater ability to pay, the HUD ratio does not "account for the actual financial constraints faced by individual households" (Bogdon & Can, 1997, p. 48) which would aid any attempts to predict whether or not a household is able to pay. Using the ratio to predict ability to pay is inappropriate as it is merely a descriptive measure (Hulchanski, 1995).

The HUD ratio, in its simplicity, fails to consider other factors that influence housing cost, such as interest rates, home appreciation, and increases in household utilities (Bogdon & Can, 1997; Linneman & Megbolugbe, 1992). An additional flaw is that the HUD ratio uses transitory income (or the present income of the household) rather than permanent income (or the long-term income over the life of a household). Permanent income can be used by projecting future changes in income. For example, will a household be receiving less income in the near future due to family reasons, such as going back to school, taking a lower-paying job, or other foreseen circumstances? It makes more sense from a policy perspective to use permanent income to show long-term affordability rather than affordability at a given point in time (Bogdon & Can, 1997) because it provides a picture of the sustainability of the house payment over time, not just at the time of qualifying.

National Low Income Housing Coalition Housing Wage Measure

The National Low Income Housing Coalition (NLIHC) Out of Reach data use information from HUD to develop statistics to calculate the Fair Market Rent (FMR) and the needed hourly wage, e.g., Housing Wage that estimates a worker's ability to afford the FMR in a given area. The Out of Reach data compare the Housing Wage to local wage and income levels for every county, metropolitan area, and state in the country (NLIHC, n.d.). For example, in order to afford a two-bedroom FMR of \$678 (as estimated by HUD), a household must earn an hourly, full-time wage (Housing Wage) of \$13.04 to avoid paying more than 30% of income on housing.

Users of the Housing Wage Measure. The NLIHC is an advocacy group focused on solving housing affordability problems for low-income households. The measure represents a consumer civic group, as opposed to the housing industry interest groups that try to influence policy makers by pushing the need for affordable housing within reach of the low-income renters (NLIHC, n.d.).

Strengths of the Housing Wage Measure. One unique aspect of the Housing Wage is that it is geared specifically toward renters. It is important to consider data specifically for renters because renters make up nearly one third of the U.S. population (NLIHC, n.d.). While the HUD ratio can be adapted to renters, the Housing Wage is designed for renters. The strengths of this measure are similar to the HUD ratio strengths because the FMR and the Housing Wage are calculated based on paying no more than 30% of income for total housing costs (NLIHC, n.d.). Another advantage of the measure is that it highlights local discrepancies in wages and housing costs.

Weaknesses of the Housing Wage Measure. As the Housing Wage can only be applied to renters, it is not helpful in determining the housing affordability situation. Also, the weaknesses that exist for the HUD ratio exist for the Housing Wage. In addition to the weaknesses of the HUD ratio, the Housing Wage does not include the expense of rental insurance.

National Association of Realtors Measure

Also known as the housing affordability index or the standard ability-to-pay ratio, the National Association of Realtors (NAR) indicator of housing affordability measures whether or not a typical family could qualify for a mortgage loan on a typical home (National Association of

Realtors, n.d.). A typical home is defined as "the national median-priced, existing single-family home as calculated by NAR," and typical family is defined as "one earning the median [gross] family income as reported by the U.S. Bureau of the Census" (NAR, n.d.). Due to the nature of the index, it actually measures more than whether or not a typical family could qualify for a loan. It shows how far over or under-qualified the typical family is (HUD, 2006). The index reports a number signifying what percentage of the needed income a family has in order to qualify for a mortgage on a median-priced home. A resulting value of 100 signifies that a family at the median income level has 100% of the needed income to qualify for a mortgage on the median-priced home; a value above 100 means that a family has more than enough to qualify. This index assumes a 20% down payment and that the monthly principal and interest payment on the mortgage does not exceed 25% of the median family monthly income (NAR, n.d.). This index is important to consider because it is based on an industry perspective and not on government recommendations, i.e., the HUD measure.

Users of the NAR Measure. The NAR measure is used by its creator and advocator, the National Association of Realtors. It has been seen as "the most widely reported index for measuring housing affordability" (HUD, 2006, p. 41). The NAR measure was first published in 1983 (Center for Real Estate Studies, n.d.). Since then, the NAR has published monthly statistics on the housing affordability index in the United States. The U.S. national media constantly focuses on the NAR measure and has adopted it as an acceptable measure of housing affordability (Center for Real Estate Studies, n.d.). Many authors of newspaper articles who discuss the national housing affordability situation base their analyses on the NAR measure. One could say that the NAR measure is the media's "pet" housing affordability measure.

Strengths of the NAR Measure. The NAR measure can be used in virtually any housing market, local or national, as long as the median house price and median family income are known, (HUD, 2006). It is relatively simple to compute, as it only needs two variables. Other variables, such as the distribution of housing prices and family incomes, are not needed. Another strong point is that it is available for many previous years on national and metropolitan levels. Unlike other housing affordability measures, the NAR measure does consider mortgage interest rates. Mortgage interest rates are an important factor in housing affordability (Linneman & Megbolugbe, 1992)

because they affect the monthly mortgage payment and the total interest on the loan.

Weaknesses of the NAR Measure. While the NAR measure is simple to compute and often used, it is not a comprehensive measure. It does not take into account total housing costs including property taxes, insurance, and utilities (HUD, 2006). Another weakness of the measure is the way results are reported. It can be useful when used on a local level, but when national results are used to broadly define housing affordability, the measure loses its impact. It should not be assumed that the national results are the same as the local situation because housing affordability is a local market problem (Linneman & Megbolugbe, 1992).

The NAR measure cannot show “how many and which kinds of households can and cannot afford those properties that are for sale” (Stone, 2006, p. 159) which would be useful in certain studies. It does not consider housing quality, location, or neighborhood quality (Belsky, Goodman, & Drew, 2005). The NAR measure assumes homeownership and cannot be used for rental households. Further, the NAR measure uses the national median family income, which does not include single-person households. The national median family income is higher than the national median household income, which includes single-person households who also purchase homes (Harris, 2002).

Summary

A key difference in these measures is that they work on different levels (see Table 2). The HUD and NLIHC work at the household level; the NAR works at the community level. All of the measures use gross income rather than after-tax or take-home pay, the dollar amount available to homeowners and renters, to determine affordability. None of the measures account for household preference and choice. Additionally, none of the measures account for household size, and they each assume that the household and the household units and their preferences are interchangeable. As a qualifying ratio, the affordability ratio may be flawed. However, the 30% affordability standard continues to be the parameter of reference for housing policy’s purposes, such as allocation of low-income tax credits and housing vouchers.

Discussion and Implication for Practitioners

The HUD, NLIHC, and NAR indices are the most widely used housing affordability measures in the U.S. by non-profit organizations, lenders, counseling agencies, city council members, and legislators. Although each has limi-

tations, they are not useless because each represents different measures of the affordability spectrum. However, practitioners should be aware that the measures inadequately address issues such as the differences between market affordability versus individual affordability, sustainability of house payments and non-shelter necessities, and the trade-off between housing costs and transportation. Until a new, more accurate and equally practical indicator is developed, consumer credit counselors need to continue educating their clientele about the caveats of these measures. Such issues are presented in the following section.

Market Affordability Versus Individual Affordability

In the home mortgage market, there has been deep confusion between what the authors call market affordability and individual household affordability. Market affordability is the general affordability of a given area as measured by the median home price in that area. Market affordability has its purpose and is useful for the industry in predicting how profitable it would be to build and sell new homes in a given area. It could also help local planners and zoning committees decide where affordable housing developments are needed, as well as identifying locales with critical needs for housing subsidies.

Individual household affordability, on the other hand, is how much a household can afford on mortgage payments without facing a housing cost burden. For some people, all housing is affordable no matter how expensive it is. For others, no housing is affordable unless it is free. Individual affordability, as determined by a housing payment-to-income ratio, is assessed by housing counselors, educators, loan officers, and others in the housing industry that deal first-hand with an individual household’s financial situation. Collective hysterias about the drop in housing prices coupled with desires of not being priced out may lead individuals to buy a home beyond his or her capacity to sustain it.

Some scholars argued that even the individual housing affordability ratio, the widespread measure of the ratio of housing-to-income, may not sufficiently reveal the degree of deprivation of other non-housing necessities a household experiences after paying for housing (Kutty, 2006; Stone, 2006). Affordability, as defined by Stone (2006), “expresses the challenge each household faces in balancing the cost of its actual or potential housing on one hand, and its non-housing expenditures on the other, within the constraints of its income” (p. 151). In an attempt to accurately measure housing affordability, Stone (2006) made a compelling argument in favor of the residual income approach as an alternative to the ratio approach.

Table 2. Measures of Housing Affordability

Measure	HUD	NAR	Housing Wage
Proponent	U.S. Department of Housing and Urban Development (Legislative Standard)	National Association of Realtors (Industry Group)	National Low Income Housing Coalition (Consumer Advocacy Group)
Description	Housing affordable if no more than 30% of gross monthly income spent on total housing costs	Ability of family at the median income to buy a home at the median price	Calculates the Fair Market Rent (FMR) and the needed hourly wage (called the “housing wage”) to afford the FMR in a given area
Operationalize	Greater than 30% of income spent on housing equals a cost burden	Measures whether a typical family could qualify for a mortgage loan on a typical home Index value of 120 means the median-income family has 120% of income required to qualify for mortgage of median priced home	Example: to afford a two-bedroom FMR of \$678, household must earn an hourly, full-time wage (called a Housing Wage) of \$13.04, to avoid paying more than 30% of income on housing
Advantages	Specifically includes housing costs (such as utilities) Compared easily over time Easy to use; used for both renters and homeowners	Available for many previous years on national and metropolitan levels Considers mortgage interest rates Uses local house prices and census data	Geared specifically toward renters Other strengths similar to the HUD ratio
Weaknesses	No consideration of inflation, anticipated price appreciation, tax benefits, burden presented by down payment requirements; Uses gross income Not useful for predicting ability to pay, just a descriptive measure Does not account for household size	No consideration of inflation, anticipated price appreciation, tax benefits, burden presented by down payment requirements Assumes homeownership and fails to consider rental households Does not include single-person households. Uses gross income	Not helpful in determining the housing affordability situation for a homeowner. Uses gross income Other weaknesses similar to HUD ratio, except does not account for rental insurance

Residual Income Approach and the Affordability Problem

The residual income is the amount of income that an individual has after all personal debts, including the mortgage, have been paid. Stone (2006) recognized that the heterogeneity and immobility nature of housing, in comparison to a market basket of essential items, makes the cost of housing the largest and least flexible expenditure on after-tax income for most households. To put it simply, non-housing expenditures are limited by how much is left after paying for housing. This means that a household might have a housing affordability problem if it cannot meet its non-housing needs at some level of adequacy, which are influenced by social and cultural norms. In Stone's (2006) view, this would be a more appropriate indicator of affordability as opposed to the standard or ratio that is so amply used.

To make the case, the following example is considered. Assume there are two households with comparable income but different household size. One is a single person household, and the other is a couple with three children. If both households are qualified under the 30% affordability ratio of housing costs-to-income, obviously the larger household would have to spend substantially more for its non-shelter necessities than the small household to achieve a comparable life style or level of living. This fact implies that the larger household can afford to spend less for housing than the small household with the same income. Non-housing expenses of small households are, on average, less than those of large households. Therefore, the smaller households can reasonably devote a higher percentage of income to housing than larger households with the same income.

Stone (2006) recommended that the residual income approach be used "at very least for advisory purposes if not as a formal criterion" (p. 178). The residual income approach may also be used to bridge the gap between the varying housing costs from one housing market to another. The residual income approach may be a better way to assess individual homeowner and renter housing affordability because it intentionally takes into account household size and geographic location.

An adapted residual income approach could effectively be used in pre-purchase housing counseling sessions and in loan application processes with loan officers. The housing counselor or loan officer can look at the prospective homebuyer's monthly expenses and determine the amount of money that an individual could afford toward a mortgage payment while still being able to meet non-shelter

necessities. Kutty (2006) stated that housing expenditures above what a household can afford cause both renters and homeowners to "reduce their expenditures on food, clothing, health care, education, and other human capital investments" (p. 113). Approaching the issue of one's ability to afford housing through the residual income approach could ensure that households have adequate housing and non-housing expenses, thereby not endangering their financial situation. Such approaches could be modeled after the U.S. Department of Veteran's Affairs home loan program. This program utilizes the residual income approach, including household size and geographical location, to qualify veterans for a mortgage (U.S. Department of Veterans Affairs, 2008).

Housing Affordability and Transportation

According to the U.S. Bureau of Labor Statistics (2007), housing and transportation are the two largest expenses for most households. Together, they account for more than one half of all household spending. Recent studies have explored household transportation expenses as a share of total expenses. For example, a Brookings Institution study (2006) pointed out that with the increase in gasoline prices, "the average household will increase its total transportation expenditures by 14%, or \$1,200 per year. This increase alone is 3% of the median income household's annual earnings" (p. 2).

Lipman (2006) found that location is a major factor in the cost of housing and transportation, in particular the distance between residential neighborhoods and employment centers. To afford both necessities, households are making trade-offs in housing and transportation expenses by spending more on housing located near jobs or choosing more affordable housing farther from jobs with higher transportation costs and expensive commutes. Although finding a house in a suburb at a lower price used to be a strategy that resulted in savings, recent studies have shown that the increasing costs in transportation nearly wipe out any savings (Center for Transit Oriented Development & Center for Neighborhood Technology, 2006; Lipman, 2006).

The Center for Housing Policy also found that this trade-off in savings between housing and transportation is disappearing for many households. For every dollar a family spends on housing, it spends \$.77 more on transportation. However, once a commute has surpassed 12-15 miles, the increase in transportation usually outweighs the savings on housing. Therefore, in the search for affordability, some working families may witness a rise in both their monetary

expenses (e.g., commuting costs and extra child care) and non-monetary expenses (e.g. opportunity cost of leisure and family time). In order to describe an accurate picture of affordability, the Center for Neighborhood Technology (CNT) and the Center for Transit Oriented Development (CTOD) have developed a housing and transportation affordability index (CTOD & CNT, 2006). Rather than setting the threshold for housing affordability at 30% of household income, the traditional standard, this index incorporates the interaction of housing and transportation costs to provide a more comprehensive measure of affordability based on location. The affordability index draws on research from previous studies, which found that transportation costs are determined by both location and socioeconomic characteristics including limited affordable housing, few transit options, and few employment centers near or in residential neighborhoods.

On the other hand, households may be motivated to commute for reasons other than just the location of available jobs or the trade-off for more affordable housing. Households also are motivated by quality of life incentives including access to better public services and schools, closer proximity to family and friends, or shorter commute times for the other spouse or partner. Ideally, the time and money spent on commuting should be offset by lower household expenses, improvement in quality of life, and/or higher earnings. The growing dilemma for working families is that affordable housing and transit choices are limited and available jobs are often too far from affordable residential areas. This problem underscores the preservation and new development of transit-oriented housing.

What Can Practitioners Do?

Housing counselors and other housing practitioners are in a position to educate and clarify an individual's ability to afford a given mortgage or rent. This can be done in a few ways. In order to determine the ability of an individual to afford a given mortgage or rent, include all housing costs associated with the new payment, including principal, interest, taxes, insurance, utilities, and homeowner association fees, if applicable. Next, include other anticipated changes that might occur, such as transportation costs to and from work, schools or shopping, and/or increased utility costs due to a larger house or apartment. Additionally, use net income to estimate the amount an individual can afford. Due to the discrepancies in qualifying ratios and guidelines, consider setting those aside and adapting a modified residual income approach by working with an individual's income and expense statement to determine a

realistic amount that an individual can afford given anticipated housing costs.

What Can Policy Makers and Researchers Do?

In light of the current mortgage foreclosure crisis facing the United States, much concern is in the forefront about how to fix the housing and subprime lending problems. While many of the past problems can be alleviated in some way by new legislation, the perennial issue of measuring real affordability of housing in relation to non-housing necessities remains unresolved.

Perhaps the solution is closer and simpler than what researchers, policy makers, the housing industry, and educators have been proposing. Lending should be based on the ability to pay taking into consideration household size instead of the ability to pay based on a credit score, speculations about home appreciation, or income increases. The qualifying ratios and other factors involved in the loan application process should be reviewed to determine if the assessments show an accurate portrayal of housing affordability. Housing affordability measures should continue to be studied, as new developments or clarification could lead to a better understanding of how to determine a household's ability to afford a given mortgage.

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