#### **Ontario Human Rights Commission**

Sinclair and Newby v. Bexon Investments Ltd. et al. Board of Inquiry File Nos. BI-0207/8-99

# THE USE OF MINIMUM INCOME CRITERIA SUMMARY OF EVIDENCE

# J. DAVID HULCHANSKI, PhD, MCIP

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- 1. I have evaluated the validity and reliability of minimum income requirements that use a ratio of housing expenditure to income to assess the risk of default in a housing provider's decision to rent to an applicant. Based on my extensive research on the issue of housing affordability measures over my twenty year academic career and my understanding of the issues involved in this case, it is my opinion that using a ratio of housing expenditure to income does not accurately assess the risk of rental default. I describe the problems of the ratio below, along with a brief summary of the its development and use by housing providers.
- 2. A household is said to have a housing affordability problem, in most formulations of the term, when it pays more than a certain percentage of its cash income to obtain housing. Various "rules of thumb" about housing affordability have been used since the 1850s, but these rules of thumb are based on little more than personal assumptions about what average households tend to spend and beliefs about what households ought to spend, rather than any empirical or scientific data. Housing researchers over the past few decades have dismissed rule of thumb measures as misleading and invalid indicators of

either housing need or affordability (see, for example, Donnison, 1967:255-256; Lane, 1977:iv-v; Fallis 1985:20; Stone, 1990:50-51; Kearns, 1992:540). The inadequate definition of "income" in conventional housing expenditure-to-income measures, which I will discuss in paragraphs 21 to 26, helps explain why it is impossible to construct a simple but empirically valid statement to describe the appropriate relationship between housing expenditure and income.

3. The use of income ratios in housing analysis has its origins in the empirical work on consumer behaviour by a nineteenth century German statistician, Ernst Engel (1821-1896) and a number of other lesser known nineteenth century analysts of household budgets. In his history of the use of the housing expenditure-to-income rules of thumb for the U.S. Department Housing and Urban Development, Lane (1977:5-6) states that Ernst Engel "proposed an 'economic law' which included the proposition that the percentage of income that households spend for lodging and fuel is invariably the same what ever the income." In contrast, another leading 19<sup>th</sup> century statistician, Herman Schwabe, "suggested that, as total family income rises, the amount allocated to housing increases at a lower rate." (Id.) In 1868 Schwabe published the first detailed research on the housing part of the household budget, proposing a "law" related explicitly to housing. His law stated: "The poorer anyone is, the greater the amount relative to his income that he must spend for housing" (Stigler, 1954:100). Lane implies that even though Engel was wrong and Schwabe was closer to being correct, the contemporary use of the 25% or 30% rule of thumb defining affordability is closer to Engel's position. To

add to the confusion, Margaret Reid, in her 1962 book *Housing and Income*, a work quoted by many neo-classical economists who write about the elasticity of housing demand (e.g., Winger, 1968), finds "very substantial evidence" for the "rejection of the Schwabe law on rent," even though, Reid notes, the Schwabe law "has long been accepted and many predictions and policies have been formulated with such expectation." To add further to this intellectual disarray over which "law" was or is the "law," economist George Stigler (1954:99) notes that towards the end of Engel's career (in 1895) he recognized, based on further empirical evidence, that his earlier formulation of the housing part of his (Engel's) "law" was indeed wrong. So there is, then, the early Engel law and the late Engel law to choose from, and one can find Engel quoted both ways.

4. Making generalizations about income and expenditure on housing presents numerous conceptual and practical difficulties. What is to be included in *housing* costs: cash rent, some or all utilities, maintenance, furnishings? What is meant by *income*: gross or net, one or all adults' income, children's income if any? What about sharp temporary fluctuations in income and non-cash sources of goods and services which would otherwise have required expenditure of cash income? As a result, numerous other laws of consumption related to housing flourished from a growing number of academics and government officials, using analyses of additional sets of budget data. Zimmerman (1936) lists 36 different laws or theories about the relationship of household expenditure

and specific budget categories, many related to housing but with eight specifically focused on housing.

5. It is not unfair to conclude, in agreement with economist George Stigler in his 1954 review of this "scientific" body of work on household budgets, that none of this constitutes a solid contribution to either theoretical or empirical understanding of consumer behaviour. Rather, this history of attempts to study household consumption is largely a comedy of errors – conceptual, theoretical, empirical and methodological errors – in all kinds, combinations and permutations. Zimmerman refers to all of this as "fog which shrouds theories of the relation between residential rent and the standard of living." There is, he writes sarcastically, "a series of so-called budgetary laws of rent such as the one by Schwabe, the rent law erroneously attributed to Engel, the revised rent law developed by the critics of the spurious law of Engel, and the several other alternative theories ..." (1936:180). By the 1930s the attempt to define "laws" of housing consumption had run out of steam. Zimmerman's 1936 text on household consumption is one of the last major works to examine and, in doing so, dismiss this approach to understanding consumption patterns. After clearing away the fog, Zimmerman concludes that "no absolute laws can be postulated" about the relation between income and housing.

"Now we must conclude that there are no fundamental general relations between income and the proportion used for rent .... The values classified under 'rent' are so complicated and so many influences come to bear upon the rental paid for or imputed to a house that each time and each social situation leads to unique results.

- ... In general, it appears that the relations between income and expenditure in the field of housing are so unpredictable and so varied that no absolute laws can be postulated." (Zimmerman, 1936: 194, 197)
- 6. The same unpredictability and variances in the field of housing make it impossible to establish any valid housing cost to income ratio in 1999. There are no studies or body of literature concluding that a particular ratio or any ratio is an appropriate measure of what a household ought to spend. The assertion that a certain ratio is too high for certain households seems to be based on nothing more than *ad hoc* observations by late 19<sup>th</sup> and early 20<sup>th</sup> century social reformers and local public health and social welfare officials about what lower income or average wage earners can pay without affecting their ability to pay for food and other necessities. This has been turned around in recent decades and used in the private rental housing market as a measure for determining which households it is best *not* to rent to, based on the assumption that tenants who fail an arbitrarily selected rent-to-income ratio, as a group, do not have the ability to pay the rent.
- 7. As the brief history outlined above indicates, the debate associated with both scholarly and practical attempts to generalize about the relationship between the level of household income and housing expenditures was largely settled in scholarly circles by the 1930s. Zimmerman's 1936 work is an example of the conclusions reached by the 1930s about the fruitlessness of attempts at making "laws" broad universal generalizations –

about the relationship between such complex aspects of human behavior as housing expenditure patterns and household income.

- 8. Yet during the late 20<sup>th</sup> century some landlords have begun using a simple expenditure-to-income ratio as an assumed to be valid and reliable measure of ability to pay, and as such, a measure of their risk.
- 9. It is necessary to carefully distinguish some of the ways in which rent-to-income ratios are now being used, as some are appropriate, while others are not. In the post-war housing literature it is possible to find the housing expenditure-to-income ratio (often referred to as a 'housing affordability' measure) being used in six distinct ways:
  - 1) description of household expenditures;
  - 2) analysis of trends and comparison of different household types;
  - 3) *administration* of public housing by defining eligibility criteria and subsidy levels in rent geared-to-income housing;
  - 4) *definition* of housing need for public policy purposes;
  - 5) *prediction* of the ability of likelihood that a tenant household to pay may default on market rent; and
  - 6) *selection* of tenants who can afford to pay market rent and are therefore less likely to default. (Hulchanski, 1995)

Much of the contemporary use of the housing expenditure-to-income ratio, as this list indicates, relates to the problem of defining housing "affordability." This list helps in the process of distinguishing between appropriate and inappropriate uses of housing

expenditure to income ratios. "Appropriate" means an empirically valid and reliable measure of that which it is being claimed to measure.

- 10. The list can be divided into two categories. The first three uses of housing expenditure-to-income ratios description, analysis and administration can be considered valid and helpful when used properly by housing researchers and administrators. By "used properly," I mean that the research methods and the statistical analysis techniques are properly carried out, i.e., no significant methodological errors are made. This leads to valid and reliable descriptive and analytic statements about the expenditures on housing of the different types of households being studied. This type of description and analysis of household expenditure patterns can also be helpful in defining administrative rules about eligibility for housing subsidies which are distributed on the basis of need (as opposed to universal programs).
- 11. Theoretical and conceptual errors lead to invalid and unreliable results in the other uses of housing expenditure-to-income ratios. Uses four, five and six definition, prediction, and selection are all invalid uses for they fail to measure what they claim to be measuring even if the research methods and the statistical analysis techniques are properly carried out. The ratio is faulty when used to define housing need and predict the "affordable" rent level for a group of households due to a faulty conceptualization of the income part of the ratio.
- 12. The central premise of these uses of housing to income ratios is that there is a causal relationship between a group characteristic, those tenants paying more than a

particular rent-to-income ratio, and the likelihood of default. Those who assert that such a relationship exists have many questions to answer, because the existing body of knowledge in housing and related literatures establishes that no such relationship exists.

- 13. In order to test the claim that a causal relationship exists, one must examine the likelihood of default among those whose cash income falls below the minimum income requirement. Assuming that those who do not have a cash income exceeding three times the rent (for example) *are* accepted for tenancy, how many actually will default? Is the likelihood of default in the group 100%, 80%, 50%, 30%, 10% or some other figure? How is the likelihood of default measured? If some percentage of tenants who make less than the minimum requirement will not default, is it fair to reject those households simply because they have been grouped with those who might default based on a shared characteristic and group identification?
- 14. The rent-to-income ratio selected by a landlord becomes the border or cut-off point between the two groups of applicants. Having used the rent-to-income ratio to create the two groups of applicants, landlords then act on their belief and I have yet to see any evidence to support the belief that applicants in the group with lower incomes will not pay the rent. There is no scientific basis for this belief.
- 15. The use of a rent-to-income ratio does nothing more than create two very artificial yet distinct *group identities* among the tenant population. One is an excluded group of applicants who have lower cash income compared to the other non-excluded group. All members of the excluded group of tenants are thus burdened with the

judgement by landlords that they cannot afford to pay the rent. All members of the excluded group of tenants will, therefore, find themselves excluded from many or most vacancies. In their own assessment of their financial situation, they (the tenants) *can* afford the rent. That is why they are applying for a particular apartment at a particular rent level. Their assessment of their ability to pay the rent is based on a much more detailed set of information and criteria than a simple ratio – a ratio that uses but one limited definition of 'income' (as discussed in the following paragraphs). Yet, all members of the group are simply excluded and currently have little, if any, recourse.

16. A serious additional error with the housing expenditure-to-income ratio is that it relies on a faulty definition of "income." What is household "income"? What is meant by "income" in minimum income criteria? The ratio fails to be a valid measure of housing affordability in part because it relies on the income that is easiest to measure – cash income. It ignores the many other economic sources of support, both cash and non-cash, by which households meet their needs.

17. Since households do not exist in isolation from the broader forms of societal organization (family, friends, community/self-help and religious/charity organizations, government programs), formal economic relations in the cash-based marketplace are but *one* method for meeting material needs. While the reliance on markets may be quite extensive in Western, advanced-industrial economies such as in the United States and Canada, households by no means rely exclusively upon the marketplace to secure the goods and services they need. Many if not most households rely on a range of sources

and strategies for meeting their needs. This more complete concept of "total household resources" offers a more accurate method for describing and assessing the ability of a household to obtain life's necessities.

18. Theory and empirical evidence both point to the fact that all households, rich and poor in terms of cash measures of income and wealth, meet their basic needs though a variety of methods. There are five economic spheres by which households can obtain resources (cash and non-cash) for meeting their needs:

- 1) the **domestic** economy, internal to the household;
- 2) the **informal** economy, the extended family and close acquaintances;
- the <u>social</u> economy, neighbourhood and community-based groups and agencies;
- 4) the **market** economy, the formal marketplace; and
- 5) the **state** economy, government (Hulchanski and Michalski, 1994).

This typology is drawn from the vast body of theory and empirical evidence of how people meet their needs. The empirical evidence indicates that households survive and even thrive in a complex intermingling of different economic spheres with their attendant webs of social relationships. When households find themselves in temporary situations of financial duress, most have other options for substituting certain types of self-provisioning and non-cash exchanges, especially to ensure that their basic needs are met. Indeed, the one general proposition that seems to emerge from the many studies of sources of social and economic support may be stated as follows: *net of market earnings* 

(wages, interest, investments, etc.) and government transfer payments, households rely upon an extensive network of socio-economic relations to ensure that their basic needs are met.

- 19. Research on how households obtain their basic needs indicates that they may rely on a substantial amount of self-provisioning and upon informal networks of extended kinship, friendships, neighbours, and acquaintances (e.g., Rose, 1985; Felt & Sinclair, 1992; Martin & Martin, 1985). In addition, resources are often obtained through linkages established in the social economy and nurtured in civil society, including charitable organizations, community groups, collectives, and co-operatives (Quarter, 1992). For the most part the exchanges in these non-market, non-governmental spheres are not formally recorded, although some segments of the social economy tend to be somewhat more formalized.
- 20. A more inclusive definition of income must be based on an assessment of how households *actually* meet their needs. Recognizing the full range of methods by which households meet their needs requires keeping in mind the severe limitations of the conventional measure of affordability based on the narrow definition of income. The concept, *total household resources*, represents the total amount of *cash*, of *goods*, and of *services* received in a given period of time (e.g., monthly). It is the significant difference between monthly cash income and the total household resources that may be called upon by a household in order to avoid defaulting on rent which accounts, in part, for the failure of 'minimum income criteria' to serve as a predictor of the ability to pay rent.

- 21. Minimum income requirements that define income without considering total household resources may be easier to administer, but they simplify reality to the point that they *fail* to represent the economic resources available to households. Consequently, they are unreliable predictors of rental default.
- 22. The inadequacy of the conventional measure of income as cash income, combined by the recognition of the reality of how households actually meet their needs, explains why a substantial number of renter households manage to spend a *huge* percentage of their cash incomes on rent without defaulting.
- 23. The 1991 and 1996 Statistics Canada Census data on housing and incomes for Ontario and the City of Toronto (i.e., the former 'Metro Toronto') provides the following information on renter and owner households spending more than 30% of income on housing. Figure 1 provides the percentage figures while Figure 2 provides the absolute number of households. According to the 1996 Census (which provides income data for 1995), well over 40% of all renter households in the City and the Province were paying over 30% of their income on gross rent. This is a rather dramatic increase from the 1991 Census data. In 1990 about one-third of renter households were spending over 30% of their income on rent. It should be noted that many homeowners also spend over 30% of their household income on housing. The average was about 20% in 1995.

Figure 1  Percentage of Households Spending 30% or More on Housing, Province of Ontario and City of Toronto, 1990 and 1995						
Province of Ontario						
	1990	1995				
Owners Renters	18% 33%	19% 44%				
City of Toronto (form	er 'Metro Toroi	nto')				
	1990	1995				
Owners Renters	21% 33%	23% 45%				
Data Source: Statistics C						
Published Source: When	re's Home? A Pict	ure of Housing Needs ir	n Ontario,			

As Figure 2 indicates, this is a very large number of households. In 1995 over one million Ontario renter and owner households were spending over 30% of their income on housing. About a third of these households were in the City of Toronto.

Website: http://www.housingagain.web.net

24. If the housing expenditure-to-income ratio, based as it often is on 30% or 35% of income, is a valid and reliable measure of housing affordability and ability to pay rent, then Ontario and the City of Toronto would be facing a crisis of historic proportions – one million households facing eviction for inability to pay rent. In the City of Toronto alone, over 200,000 renter households would be facing eviction and homelessness and

numerous rental property owners would no doubt be going bankrupt. Why is this not happening?

Figure 2  Number of Households Spending 30% or More on Housing, Province of Ontario and City of Toronto, 1990 and 1995					
Province of Ontario					
	1990	1995			
Owners Renters	405,000 435,000	470,000 615,000			
City of Toronto (former 'Metro Toronto')					
	1990	1995			
Owners Renters	85,000 145,000	100,000 215,000			
Data Source: Statistics C Published Source: When			in Ontario,		

1999. Table 4.4.1.

Website: http://www.housingagain.web.net

25. The reason for the absence of massive defaults despite these figures has been well established in the housing literature for at least two decades. The housing expenditure-to-income ratio is not an adequate estimate of the household's ability to meet its basic needs and it is an invalid indicator of a household's risk of default. "Given the variety of circumstances facing different households," Baer (1976) writes in his study of housing indicators, "rules of thumb about the percent of income to be devoted to housing can be extremely misleading in individual cases and therefore in aggregate data as well." He adds that a "rent-income ratio for one kind of household may not be appropriate for another, and that imposing the same standard for all households is unrealistic" (Baer (1976:383-384).

26. There is, therefore, no reason to fear that hundreds of thousands of Ontario's households will be failing to pay their rent and getting evicted simply because they are devoting more than 30% of their household income to rent. The housing expenditure-to-income ratio is simply not a valid and reliable indicator of ability to pay rent and of the risk of default. The rent-to-income ratio data in Figures 1, 2 and 3 are examples of use #1 (description) and use #2 (analysis of trends) in my list of the six ways in which rent-to-income ratios are used (see paragraph 9 above). This data does not provide any insights into default rates – whether or not households at a particular rent-to-income ratio are likely or unlikely to default.

27. Some might still question this conclusion by arguing that a higher rent-to-income ratio, higher than 30%, *would* be a valid indicator of massive defaults. Are there any studies supporting this argument? I have not been able to find any. What about tenant households that spend over *half* their income on rent? In 1995 there were about 300,000 Ontario and about 100,000 City of Toronto tenant households spending 50% or more of their income on rent (see Figure 3). Where are the massive numbers of defaults and evictions? The fact is that some households spending 20% on housing may default on

rent or mortgage payments while households spending 80% may not. One primary reason is that the ratio uses a narrow definition of income (as explained above in paragraphs 16 to 22).

Figure 3							
Renter Households Spending 50% or More on Housing, Province of Ontario and City of Toronto, 1990 and 1995							
Province of Ontario							
	1990	1995					
% of renters number	15% 195,000	22% 300,000					
City of Toronto (former 'Metro Toronto')							
	1990	1995					
% of renters Number	15% 65,000	23% 105,000					
	03,000	100,000					
Data Source: Statistics Canada, 1991 and 1996 Census.							
Published Source: <i>Where</i> 1999. Table 4.4.1. Website: http://www.hous		re of Housing Needs in Onto	ario,				

28. In short, the inadequacy in the definition of income used in the standard housing expenditure-to-income ratio is itself enough to invalidate the use of minimum income criteria by landlords in the rental marketplace. It is not a valid and reliable indicator of what it claims to measure. There is no evidence to support its use as a

measure of housing affordability, or ability to pay, or the risk of default. There is a great deal of evidence to the contrary – evidence that many households, past and present, pay more than the prescribed ratio without defaulting on their rent. The reality of how households manage to meet their needs, including the need to have the cash to pay their rent, is too complex and diverse to be summarized in one simple measure.

- 29. Will the owners of rental housing suffer financially if they are prohibited from using minimum income criteria in the decision to rent? If the housing expenditure-to-income rule of thumb is not a valid and reliable measure of ability to pay rent, as argued above, it simply does not measure what the users claim or believe it measures. It combines two conceptual errors: the application to individual households of an unscientific rule of thumb based on an aggregate average, and a narrow focus on only the cash income resources of a household.
- 30. If housing providers stop using an erroneous, invalid measure as part of the criteria in the decision to rent to a particular household, landlords will either be unaffected or better off. Landlords may continue to see the same proportion of defaults, because the minimum income requirements they previously used to assess an applicant's ability to pay did not accurately measure the applicant's ability to pay. Either nothing changes or landlords are better off when an erroneous measure of risk ceases to be used.
- 31. I have examined in a systematic fashion the implications of the use of income based screening criteria by landlords. I have traced the history of the use of rent-to-income ratios as "affordability criteria" and assessed available evidence justifying their

use as valid and reliable predictors of default. I have deconstructed one of the key assumptions, the nature of "income," in the rent-to-income ratio. Finally, I have examined the implications for landlords of relinquishing the use of income criteria. This research leads to the conclusion there is no empirical validity to the rent-to-income ratio as a measure of ability to pay and that its use by landlords is both ineffective and inappropriate.

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J. David Hulchanski

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