Do Courts Matter?
Housing Rental Market Development and the Law

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Abstract

We extend the research in the Law and finance literature to the housing market. Legal systems that provide investor protection may facilitate investment, the development of markets, and foster exchange and transactions. However private contracts, private enforcement, or reputation may provide substitutes to inadequate government protection. Moreover market development may naturally *generate* increasing demand for investor protection and improvements in the law: *existing* laws might not matter for *future* market development. Therefore, the extent to which regulations matter for market development is an empirical issue. Using the data on rental market regulation provided by Djankov, Laporta, Lopez de Silanes, and Shleifer (2002), we show that regulations unfavorable to investors in rental properties hamper the development of the rental market in a cross-section of countries. We use an IV strategy to argue that this association is not the result of reverse causation from a developed rental market to more investor-protective regulations. The results provide complementary evidence on the importance of regulations for the development of financial and other markets.

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1. Introduction

Investor protection laws refer to law and process requirements that facilitate maximization of investor value. In the housing market, examples include minimal due process before the eviction of a tenant who breaches one or several clauses in a lease contract, or a short delay between the notice of eviction and actual landlord repossession of premises.

A salient question in law and economics has been to what extent government regulations and public investment protection matter for the development of well-functioning markets. The answer to that question is by no means obvious, since private substitutes to legal investor protection exist. Parties can design private contracts for those aspects not covered by the law, and enforce them through more or less costly alternative means. The Coasian view stresses the ability of interested parties to privately contract in an efficient way. To the extent that Courts enforce such contracts, the law should be irrelevant, as the parties can fill the gaps in the legal system. Alternatively, if Courts cannot be used, other private means of enforcement may also be available. Repeated interactions with the same parties, reputation, retaliation, and private debt collection are some examples. There is no doubt that a government-sanctioned legal environment can reduce transaction costs by alleviating the need to rely on more costly technologies of contract enforcement. The question is how these effects manifest (what is the exact mechanism through which the law matters), and to what extent (what is the elasticity of market size with respect to legal protection). To the extent that these alternative means of enforcement are close substitutes, we ought to observe only small effects on market outcomes.

We argue that an important channel through which the legal system affects the market development and its performance is through its effects on the allocation of ownership and control rights. To the extent that contracts can be enforced, they will allocate these rights in an efficient manner to maximize the welfare in the relationship. But when the transfer of control is costly to enforce, we may see departures from that optimal allocation.

To examine this, we focus on the market for rental properties. An important element of the functioning of the housing market relates to the allocation of ownership rights. In certain circumstances, people find it optimal to acquire ownership rights of the housing they are living in. In others, an owner-investor may acquire these rights, and then sell the right to the property's posession for a limited period of time to a tenant by offering a rental agreement. In a frictionless world, the choice between these two alternative arrangements will reflect their respective benefits. But in a world where contract enforcement is costly, buying and subsequently leasing a property entail higher transaction costs, and hence the importance of this market will diminish. Furthermore, given the high number of the market participants, and the limited extent of repeated interactions, alternative means of enforcement may have limited applicability here. Hence, it is a natural place to test for the shift in the allocation of control rights in response to differences in the legal system regulating the market, and to measure the sensitivity of this response.

There are two complementary reasons for examining the housing market. *First*, this market is one of the most important in all countries. Housing is a primary consumption necessity and the most important asset for many families. The existence of a functional and efficient rental market may be a major

determinant of economic welfare and development. In the presence of liquidity constrains, a functional rental market may help young families to obtain adequate housing while saving for a down-payment. A thick rental market may also facilitate mobility within a city and across regional labor markets, thus "greasing the wheels" of the national labor market. Furthermore, from a choice perspective, the option to rent will surely be valuable to households. If this option is not available, some of them may not be able to diversify their portfolio and be forced to "over-invest" in real estate assets in order to satisfy their demand for housing services (primary and second residence).

Secondly, the law and finance literature has concentrated on the impact of investor protection laws on financial development. Several measures of financial development have been proposed in the literature. The research in the literature typically uses cross-sections with a limited number of country observations and typically finds evidence of a positive correlation between investor protection laws and market development. This is, of course, consistent with a causal interpretation. However, at this stage, a limiting issue for the growth of that literature is the paucity of data. Using the same or similar data over and over for statistical inference is problematic (Sala-i-Martin, 1997). A way to avoid issues with data-mining is to use alternative data sets. Finding that protection of investor rights fosters the development of the rental market gives some support to the hypothesis that these rights are *generally* favorable to market development. In that sense, our results support the conclusions from the law and finance literature using completely different data and methodology.

The remainder of the paper is organized as follows. In section 2, we briefly discuss previous research on homeownership, and the links between a functional

rental market and the labor market. Section 3 describes the data and its limitations. Section 4 presents the main results of the paper. We find that countries with regulations that are less advantageous for investors in the rental market tend to have a lower percentage of households living in rental units. Thus, the size of the rental market (relative to population) is positively associated with laws that provide more investor protection. Section 5 concludes the paper.

2. Background

There is an extensive literature on the determinant of home-ownership rates in the United States. This literature usually relates observable individual attributes to the propensity of a household to own (versus renting or other housing arrangements). Some studies have focused on the importance of accessibility to credit to account for housing tenure choices (as in Linneman and Wachter, 1989). Other papers concentrate on the evolution of other observable household characteristics. A fine example of this literature is Gyourko and Linneman (1996). These authors find that higher income, age, white race, college education, suburban location, and living in the South are all positively related with the propensity to own a home. But these papers do not attempt to address the general equilibrium question on the extent of the rental market, and they do not examine the determinants of the *supply* of rental units.

Recently, Jaffe and Fisher (2003) have used data similar to these used in this paper to explain the determinants of homeownership rates in a cross section of world countries. These authors find that homeownership rates are statistically

significantly related to GDP and percent urban population (negative relationship) and to the existence of mandatory housing finance programs (positive relationship). Interestingly, these authors find that countries with German legal origin tend to have significantly lower homeownership rates, but the authors do not provide an explanation for that correlation.

Chiuri and Japelli (2003) find that the availability of mortgage finance affects the distribution of owner occupancy across age groups using a sample of 14 OECD countries. These authors demonstrate that the average legal duration of mortgage foreclosure is a good predictor of higher down-payment ratios (one minus the loan-to-value ratio that is required on average to take out a home mortgage). In countries with higher down-payment requirements, it takes longer for the young to purchase a home. Chiuri and Japelli (2000), however, point out that "the *average* homeownership rate does not correlate with the size of the mortgage market, or with other indicators of housing finance." The authors argue that this is "evidence that high down-payment ratios affect the timing of home purchases, but do not discourage people to become homeowners." This outcome is possible if young individuals stay longer periods in their parent's homes.

It is interesting to point out the possibility that the duration of mortgage foreclosure proceedings may be strongly correlated with the duration of the repossession of a rental unit in the case of rent non-payment. Thus, regulations that are less protective of investor rights in the rental and financial markets may be partially accountable for both low average rental occupation rates and low homeownership among the youth in some countries, such as Italy.[1]

[1] Thus, other outcomes, such as living with the parents, are inescapable in some of these countries.

Why are rental shares an important economic outcome? The main reason is that if the existence of weak investor protection laws is artificially reducing the supply of rental housing, this reduces the choice available to individual households and the general welfare.

But other reasons may exist. A healthy rental market is sometimes viewed as an important element in economic development. For instance, in a series of papers, Oswald (1996, 1997, 1999), showed a positive correlation between homeownership and unemployment in several OECD countries. Oswald hypothesized that the correlation may be a result of the lack of mobility in countries without a functional thick rental market. A recent literature has examined the hypothesis in more detail. Flatau et al. (2002a, 2002b) do not find evidence consistent with the Oswald hypothesis using Australian micro and regional data. However, recent studies by Brunet and Lesueur (2003), Munch, Rosholm, and Svarer (2003), and van Leuvensteijn and Koning (2004), all find a positive association between homeownership and unemployment hazard or duration using individual data in different European countries. We do not take sides on this debate here. For our purposes, it suffices to argue that a functional rental market *may* be an important element for a mobile and fluid labor market.

3. Data

The main dependent variable of interest is the percentage of households in the market that rent (i.e. the relative size of the rental market). This variable, that we call tenancy, is obtained from two related sources. The Urban Indicators Database (UID) from the UN provides an estimate of this variable at the city

level for a sample of major cities in 1998. The same database provides other variables on the city characteristics. Since there are many missing observations for some of the variables we will use them on a one-by-one basis in the regressions. Data with estimates on homeownership rates at the country levels are obtained from the UN Habitat database. This database does not contain information on the share of households living in rental units. The share of renters is not generally one minus the share of homeowners because there are alternative possible housing outcomes: public housing, squatters, and homelessness. Thus, the results using the national data are not directly comparable to the results using the city data (for which we do have an estimate of the extent of the private renter market). However, the results are consistent with them and we regard them as a robustness check with a different data set that is not subject to criticisms as to the selection of cities included in the UID sample. We match these housing data with the "Courts and Judicial Efficiency for 109 countries" dataset from Djankov, Laporta, Lopez de Silanes, and Shleifer (2002). The dataset contains several variables that are of vital importance for our estimation. The main explanatory variables of interest will be the time to repossession (which we deem Total Duration) and the formalism index. The former variable is an estimate of how many days it takes on average for the landlord to regain possession to her housing unit in case of rent non-payment. Faster execution of the repossession judicial process will be interpreted as more protective of investors' rights. The second variable (the formalism index) "measures substantive and procedural statutory intervention in judicial cases at lower-level civil trial courts. The index ranges from 0 to 7, where 7 means a higher level of control or intervention in the judicial process" (Djankov et al., 2002). The index

can be seen as an indicator of the extent of legal costs for the landlord in the case of rent non-payment and repossession. Thus, the higher the indicator, the lower investor protections in the rental market. Djankov et al (2002) also provide data on the formalism index and total duration of a legal process where the outcome is the collection of a bounced check. We will use these variables as instruments for investor protection in a country that should be uncorrelated to outcomes in the rental market.

Finally, we also use other country data from the World Bank. A detailed description of the data and its sources for all variables used in this paper can be found in the Data Appendix.

4. Results

Our estimates correspond to the basic model in:

$$(1) \qquad \ln(tenancy_{ki}) = \alpha + IP_i\beta + X_i\lambda + Z_{ki}\delta + \theta_i + \varepsilon_{ki},$$

where the subscripts k and i denote city and country respectively, tenancy is the share of renter households, IP stands for the (alternate) measures of investor protection in the country, X is a vector of country characteristics, Z denotes city characteristics, θ is a country random effect, and ε is white noise. The random effects model takes into account the correlation between outcomes within the same country (note that the IP indicator does not vary within a country). We perform the regressions with the relevant variables in logs. We have a sample with 101 cities in 46 countries.

Table 1 presents the results from our baseline specification. In columns 1, 2, and 3 we simply correlate the two measures of investor protection rights with the log of the tenancy rate and find that the coefficients are generally significant and have the expected sign: countries with poorer investor protection in the rental market (longer times to repossession and higher formalism indexes) tend to have relatively smaller rental markets. In column 4, we add other major country characteristics: GNP per capita and population density and obtain similar results.[2] In quantitative terms, the results (column 4) suggest that a 1% longer duration of the legal repossession process is associated with a 0.33% smaller rental share in the housing market. The elasticity with respect to the formalism index is -0.96, which we interpret as a qualitative result consistent with the importance of investor protection for market development.[3] In columns 5 through 12, we include other explanatory variables at the city level: crime (related to general enforcement of property rights), average travel time to work, access to water, under 5 mortality, median income and government taxation. Unfortunately, our variable selection is much constrained by data availability. Indeed, since there are many missing observations for each of these explanatory variables we include them one-by-one sequentially.[4] None of these variables enter significantly in the regressions (except for the logarithm of local government

[2] We tried including other country specific variables such as life expectancy, death rates, the Gini index, percentage urban population, percentage population aged 15-64, percentage of population aged 65 and beyond, rule of law and order, corruption, latitude, and continent fixed effects. These never altered significantly the results for the main variables of interest. In all cases (except for the measure of corruption) these variables did not enter significantly in the regressions. However, since we have only a handful of countries (46), the addition of these non-significant variables had a negative impact on the efficiency of our estimates.

[3] The formalism index can take up 7 discrete values and, arguably, is by itself a more qualitative indicator of regulations.

[4] The pattern of missings does not overlap much across variables, so that the inclusion of 2 or more variables reduces the sample typically by more than half.

revenue per capita – the larger the local government the smaller the rental market). While the country sample sizes change in each estimation, and estimated coefficients on the regulation variables change accordingly with their standard errors, the qualitative conclusions do not change at all. Investor protection is associated with more developed rental markets.

An obvious problem with the interpretation of the results in Table 1 is that the causation may be the opposite to that we proposed. In countries with a more developed rental market, we may expect investor landlords to constitute a more effective pressure group for the enactment of protective investment regulations germane to the rental market. Thus, the causality may be going from market development to the law. This causality issue, is common in the literature on the law and financial development. To address this issue we use the duration of the legal process and formalism index applicable to the case of a bounced check as instruments. These variables capture how long and difficult, respectively, it is to obtain enforcement of collection of monies after a check used for the payment of goods and services is bounced. These are interesting variables for our purposes. They are clearly related to the general climate of investment protection in a country. However they are likely to be exogenous to specific housing market outcomes, such as the percentage of households who live in rental units.

In Table 2, we explore using the duration and legal formalism variables for the check case as instruments for the duration and formalism index for the repossession case, respectively. The results are not dissimilar from those in Table 1. However, the coefficient on duration to repossession appears more robust in terms of statistical significance, than the formalism index (which in any case yields estimates in the range of the OLS regressions). This is not surprising given

the high correlation between the two measures, and between its instruments, and the relative inefficiency of IV estimators in small samples. Thus, the IV regressions are consistent with a causal interpretation of our results: legal systems that are more protective of landlord rights tend to have more developed rental markets.

In Appendix 1, we present the results of regressions with instrumental variables that use dummies for the legal origin of each country as instruments for investor protection variables in the housing market. We are skeptical about the general exogeneity of legal system adoption with respect to economic development in general. However, this may be a good set of instruments with respect to housing outcomes. Moreover, it makes the results in our paper more comparable to others in the literature. For example, Jaffe and Fisher (2003) use legal origin as explanatory variables on the right-hand-side to explain homeownership at the international level, and only find a negative impact of German legal origin.

When we use these variables as instruments for the duration of legal enforcement of repossession, our results are still significant at the 10% level, and still suggest a link between investor protection laws in the rental market and market thickness.

Finally, as an extra robustness check of the results, we perform similar regressions using the United Nations aggregate estimates by country. The problem with these data is that we have the homeownership rate rather than the percentage of households living in rental units. As we mentioned earlier, the homeownership rate is not generally one minus the rate of renter-occupied households because there are other possible alternative housing arrangements

(public housing, group quarters, squatters, homelessness). However, we think this is a reasonable proxy. If we use the city data to regress one minus the ownership rate on the tenancy rate we obtain:

$$\begin{array}{lcccc} \text{(1-ownership)} & = & 0.134 & + & 0.845\times\text{tenancy} \\ & & (0.021) & & (0.059) \end{array} \qquad \textit{R-squared} = \textit{0.61}$$

Clearly, the ownership rate is a reasonable, albeit noisy, proxy for the tenancy rate. However, the measurement error in this case may not be independent of the explanatory variable of interest. Less investor-protective regulation in the rental markets may be correlated with other regulations that affect the margin between homeownership and other alternative housing arrangements.

The advantage of using data aggregated at the country level is that we are not relying on the selection of major cities in the previous sample. Economic behavior in these cities may not be representative of the country as a whole.

In any case, the results in Table 3 are broadly consistent with the previous results. Lower investor protection (in this case, the formalism index) is associated with a higher homeownership rate. With only 40 country observations, this coefficient is statistically significant at the 10% confidence level. Total duration to repossession does not appear to have any impact in this specification.

5. Conclusion

In this paper, we show that investor protection is an important determinant of the existence of a well-developed rental market. We use a cross section of countries and show that in countries with longer times for legal enforcement of repossession when the tenant does not pay rent, and with more formalistic (and thus expensive) legal repossession enforcement procedures, the share of households living in rental units is smaller. Thus, the relative development of the rental housing market is associated with the laws that regulate investor rights in this market.

In order to avoid endogeneity of the rental market law with respect to market size we have used regulations for the case of bounced checks and legal origins as instruments and obtained similar results.

In our regressions, rental market regulations are typically some of the most statistically robust variables to enter in the different specifications. From a housing market perspective, the results suggest that laws that protect investors' rights are of remarkable importance for the development of the rental market.

From a broader law and economics perspective, our results confirm the basic insights of previous literature relating market development with investor protection, this time using new data on an alternative market.

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TABLE 1
Investor Protection and Rental Market Development

	ln(Tenancy)											
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**	**(9)**	**(10)**	**(11)**	**(12)**
ln(Total Duration of Repossession Legal Process)	**-0.403** (0.154)***		**-0.34** (0.171)**	**-0.33** (0.167)**	**-0.359** (0.183)**	**-0.335** (0.169)**	**-0.322** (0.213)	**-0.397** (0.172)**	**-0.354** (0.165)**	**-0.607** (0.200)***	**-0.207** (0.152)	**-0.41** (0.168)**
ln(Formalism Index)		**-0.939** (0.486)*	**-0.463** (0.534)	**-0.96** (0.560)*	**-1.333** (0.658)**	**-0.902** (0.585)	**-1.114** (0.767)	**-1.689** (0.668)**	**-1.027** (0.554)*	**-0.897** (0.647)	**-1.454** (0.515)***	**-1.185** (0.571)**
Log of GNP per capita				-0.091 (0.088)	-0.147 (0.107)	-0.086 (0.089)	-0.144 (0.097)	-0.017 (0.144)	-0.112 (0.111)	-0.314 (0.195)	-0.172 (0.086)**	0.02 (0.157)
ln(Population Density (people per sq km))				-0.192 (0.088)**	-0.288 (0.105)***	-0.194 (0.088)**	-0.201 (0.111)*	-0.33 (0.102)***	-0.195 (0.090)**	-0.307 (0.103)***	-0.252 (0.095)***	-0.145 (0.096)
ln(Victims of Theft /'000)					-0.036 (0.080)							
Areas considered as dangerous or inaccessible to the police						-0.086 (0.236)						
ln(Travel Time per Work-Trip (mins))							0.246 (0.248)					
ln(local government revenue per capita)								-0.227 (0.110)**				
ln(Percentage Household with Access to Water)									-0.019 (0.316)			
ln(Median Household Income per Month)										0.317 (0.234)		
ln(Total Population ('000) - Urban Agglomeration)											0.027 (0.060)	
ln(Under 5 Mortality - All)												0.159 (0.167)
Constant	0.672 (0.834)	-0.276 (0.640)	0.934 (0.872)	3.038 (1.377)**	4.544 (1.575)***	2.981 (1.392)**	2.813 (1.654)*	5.413 (1.471)***	3.429 (1.509)**	4.821 (1.578)***	3.67 (1.228)***	3.331 (1.414)**
Observations	101	101	101	101	82	101	84	72	98	65	61	85
Number of Countries	46	46	46	46	38	46	36	32	45	34	29	38

Standard errors in parentheses
* significant at 10%; ** significant at 5%; *** significant at 1%

TABLE 2

Using Regulations for the Check Case as Instruments

	ln(Tenancy)											
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**	**(9)**	**(10)**	**(11)**	**(12)**
ln(Total Duration of Repossession Legal Process)	**-0.536** (0.203)***		**-0.481** (0.228)**	**-0.554** (0.221)**	**-0.611** (0.273)**	**-0.557** (0.218)**	**-0.651** (0.330)**	**-0.723** (0.275)***	**-0.583** (0.222)***	**-0.967** (0.268)***	**-0.312** (0.182)*	**-0.582** (0.249)**
ln(Formalism Index)		**-0.85** (0.577)	**-0.271** (0.650)	**-0.537** (0.674)	**-0.799** (0.863)	**-0.471** (0.694)	**-0.091** (1.103)	**-1.134** (0.844)	**-0.584** (0.683)	**-0.704** (0.767)	**-1.498** (0.590)**	**-0.742** (0.744)
Log of GNP per capita				-0.076 (0.098)	-0.135 (0.128)	-0.07 (0.099)	-0.143 (0.114)	-0.063 (0.169)	-0.133 (0.126)	-0.338 (0.206)	-0.174 (0.092)*	0.073 (0.180)
ln(Population Density (people per sq km))				-0.169 (0.096)*	-0.237 (0.124)*	-0.174 (0.096)*	-0.124 (0.134)	-0.303 (0.125)**	-0.155 (0.101)	-0.307 (0.114)***	-0.236 (0.100)**	-0.085 (0.116)
ln(Victims of Theft /'000)					-0.013 (0.090)							
Areas considered as dangerous or inaccessible to the police						-0.124 (0.244)						
ln(Travel Time per Work-Trip (mins))							0.292 (0.249)					
ln(local government revenue per capita)								-0.176 (0.116)				
ln(Percentage Household with Access to Water)									0.15 (0.332)			
ln(Median Household Income per Month)										0.387 (0.248)		
ln(Total Population ('000) - Urban Agglomeration)											0.025 (0.060)	
ln(Under 5 Mortality - All)												0.148 (0.185)
Constant	1.438 (1.099)	-0.382 (0.758)	1.495 (1.138)	3.539 (1.650)**	4.937 (2.030)**	3.476 (1.651)**	2.812 (1.939)	6.534 (2.071)***	4.201 (1.824)**	6.334 (1.899)***	4.262 (1.377)***	3.056 (1.854)*
Observations	98	101	98	98	80	98	83	71	95	64	61	85
Number of Countries	44	46	44	44	36	44	35	31	43	33	29	38

Standard errors in parentheses

* significant at 10%; ** significant at 5%; *** significant at 1%

TABLE 3

	Log(Homeownership rate)
ln(Formalism Index)	0.313
	(0.173)*
ln(Total Duration of Repossession Legal Process)	-0.059
	(0.057)
Log of GNP per capita	-0.116
	(0.082)
ln(Population density (people per sq km))	0.069
	(0.075)
Constant	4.758
	(0.534)***
Observations	40
R-squared	0.12

Robust standard errors in parentheses
* significant at 10%; ** significant at 5%; *** significant at 1%

Appendix Table 1

Legal Origin Dummies as Instruments

	ln(Tenancy)	
	(1)	**(2)**
ln(Total Duration)	**-0.917**	
	(0.495)*	
ln(Formalism Index)		**-0.883**
		(0.825)
Log of GNP per capita	-0.102	-0.048
	(0.113)	(0.103)
ln(Population Density (people per sq km))	-0.164	-0.165
	(0.099)*	(0.103)
Constant	4.941	0.737
	(3.280)	(1.762)
Observations	101	101
Number of Countries	46	46

Standard errors in parentheses

* significant at 10%; ** significant at 5%; *** significant at 1%

Data Appendix

Variable	Source	Description
Total Duration	International Institute for Corporate Governance at Yale, 2002 http://iicg.som.yale.edu/data/datasets/courts_dataset.xls	The total estimated duration in calendar days of the procedure under the factual and procedural assumptions provided. It equals the sum of: (i) duration until completion of service of process, (ii) duration of trial, and (iii) duration of enforcement. The data address two specific disputes - the eviction of a residential tenant for non-payment of rent and the collection of a check returned for non-payment.*
Formalism Index	International Institute for Corporate Governance at Yale, 2002 http://iicg.som.yale.edu/data/datasets/courts_dataset.xls	The index measures substantive and procedural statutory intervention in judicial cases at lower-level civil trial courts, and is formed by adding up the following indices: (i) professionals vs. laymen, (ii) written vs. oral elements, (iii) legal justification, (iv) statutory regulation of evidence, (v) control of superior review, (vi) engagement formalities, and (vii) independent procedural actions. The index ranges from 0 to 7, where 7 means a higher level of control or intervention in the judicial process.*
Log of GNP per Capita	International Institute for Corporate Governance at Yale, 2002 http://iicg.som.yale.edu/data/datasets/courts_dataset.xls	Log of GNP per capita in 1999, Atlas method, expressed in current USD. When 1999 income data in USD were not available, latest available number was used (1996 for Kuwait, 1997 for Cayman Islands, Gibraltar, Turks and Caicos Island, 1998 for Anguilla, Bahrain, Netherlands Antilles, United Arab Emirates). Income for Anguilla, the British Virgin Islands, the Cayman Island, Gibraltar, Monaco, the Netherlands Antilles, and the Turks and Caicos Islands is GDP per capita (PPP) is from the CIA World Factbook.*
Homeownership Rate	UN Human Settlements Statistical Database version 4, 1999	Percent of total households which are owner occupied.
Median Household Income per Month	UN Global Urban Indicators, 1998	Household income is defined as the gross income from all sources, which include wages, salaries, incomes from businesses or informal sector activities, investment income, and where information is available, income in-kind such as consumption of agricultural produce which might have been sold.**

Local Government Revenue per Capita	UN Global Urban Indicators, 1998	Local government revenue per capita is the total local government sources of funds in US dollars annually, both capital and recurrent, for the metropolitan area, divided by population (three year average). It usually includes taxes, local government charges for services provided, interest and principal received, sales of capital items, transfers or other grant donations from the state or Federal government, loans, and other sources of donations or aid.**
Under 5 Mortality - All	UN Global Urban Indicators, 1998	The number of deaths for children under five years of age during the year divided by the average number of live births during the last five years.**
Areas regarded as dangerous or inaccessible to police	UN Global Urban Indicators, 1998	Areas considered as inaccessible or dangerous to the police (yes or no).**
Travel Time per Word Trip (mins)	UN Global Urban Indicators, 1998	Average time in minutes for a one-way work trip. This is an average over all modes of transport.**
Percentage Household with Access to Water	UN Global Urban Indicators, 1998	Access is defined as having water located within 200 meters of the dwelling. It refers to housing units where the piped water is available within the unit and to those where it is not available to occupants within their housing unit, but is accessible within the range of 200 meters, assuming that access to piped water within that distance allows occupants to provide water for household needs without being subjected to extreme effort.**
Total Population ('000) - Urban Agglomeration	UN Global Urban Indicators, 1998	Total population is based on the de facto definition of population, which counts all residents regardless of legal status or citizenship. Refugees not permanently settled in the country of asylum are generally considered to be part of the population of their country of origin. Urban agglomeration is defined as the city proper along with the suburban fringe and any built-up, thickly settled areas lying outside of, but adjacent to, the city boundaries.**
Population density (people/km^2)	World Development Indicators (WDI), World Bank (2004)	
http://mba.tuck.dartmouth.edu/pages/faculty/rafael.laporta/publications/LaPorta%20PDF%20Papers-ALL/Courts-LexMundiProject-All/Courts.pdf		
** http://www.unhabitat.org/programmes/guo/guo_guide.asp		