

Is Mexico the Limiting Case? Social Mobility in the New Gilded Age

September, 2013

Juan Enrique Huerta-Wong Esra Burak David B. Grusky

Stanford Center on Poverty and Inequality
Bldg. 340, 450 Serra Mall
Stanford University
Stanford, CA 94305

The Stanford Center on Poverty and Inequality is a program of the Institute for Research in the Social Sciences (IRiSS) and is partly supported by Grant Number AE00101 from the U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation (and awarded by Substance Abuse Mental Health Service Administration). We also acknowledge the generous support of the Elfenworks Foundation. We are especially grateful for comments from Florencia Torche on an earlier version of this paper.

How rigid can modern societies get? Are there any contemporary societies that approach caste-like levels of social reproduction? These questions, simple though they may seem, cannot be directly answered on the basis of the available evidence on class mobility. The main impetus for posing them is the startlingly high levels of income inequality that appear to be part and parcel of the late-industrial condition within much of the Americas, much of Asia, and even some of Europe (e.g., Atkinson, Piketty, and Saez 2011). If extremely high inequality is a relatively common feature of the contemporary condition, it's important to ask whether extremely high reproduction, even seemingly caste-like levels, tends to coexist with that extreme inequality. Because cross-national research on class mobility has been Eurocentric in focus (e.g., Breen 2004; Erikson and Goldthorpe 1992), and because Europe may be a "social democratic zone" of relatively high fluidity, it is altogether possible that we have a more benign understanding of contemporary social fluidity than we should. We take on that question here by examining patterns of social mobility within a country, Mexico, that by most measures is more unequal than any other affluent country in the world.

There is of course a rich tradition of carrying out cross-national research on class mobility (e.g., Jonsson et al. 2009; Breen 2004; Erikson and Goldthorpe 1992). The conventional view coming out of this research is that a basic "family resemblance" in the amount and pattern of social fluidity can be found in late-industrial market economies (Erikson and Goldthorpe 1992; 2002). This commonality is typically understood to be a product of the "substantial uniformity in the economic resources and desirability" of social classes (Grusky and Hauser 1984). That is, insofar as social classes everywhere control much the same resources (esp. economic, social, and cultural resources), then one would expect their capacity for reproduction will likewise be everywhere much the same. Although this conclusion has been pitched very broadly, the main evidence upon which it was originally based was quite narrowly European. The so-called core model of social fluidity, as devised by Erikson and Goldthorpe (1992), was developed with data from Western and Central Europe, with some of their supplementary analyses drawing additionally on data from Australia, Japan, and the United States.

In more recent analyses, the mobility regimes of various late-developing countries have also been examined (see Ishida and Miwa 2009 for a review), but these new analyses haven't generated results that challenge the received wisdom in any fundamental way. There is of course some amount of debate about whether the family resemblance in social fluidity is as strong as Erikson and Goldthorpe (2002) have argued. Most notably, Breen (2004) has gently chastized Erikson and Goldthorpe (2002) for exaggerating the amount of family resemblance, although his chastizing has principally taken the form of identifying countries, such as Israel, that have unusually *fluid* mobility regimes. By virtue of Breen's (2004) research, there has been widespread discussion of the Israeli case and various other high-fluidity deviations from the "core regime," whereas the obverse possibility that some non-European countries might be unusually *rigid* has not been as fully examined (but see Torche 2005). We

suggest here that the Mexican case may provide one such example of just how rigid contemporary mobility regimes can get.

This tendency to minimize the amount of cross-national variability shouldn't, however, be entirely attributed to the field's Eurocentrism. It is likely also due to the field's default to a log-multiplicative framework that privileges variability in the *average* amount of association within a mobility table (e.g., Xie 1992; Goodman 1979). When non-European countries have been analyzed, this methodological approach has almost always been adopted, often because the sample size has been too small to detect more targeted ways in which extreme inequality and other country-specific institutional forces may affect fluidity (Ishida and Miwa 2011; Ganzeboom, Luijkx, and Treiman 1989; cf. Torche 2005). As will be argued below, extreme inequality will likely only have effects on particular sectors of the mobility table, thus making the usual smoothing models a blunt instrument with which to detect such effects. We draw on Torche's (2005) important work in developing our hypotheses.

The upshot is that the field's Eurocentrism, coupled with its predilection for aggressive smoothing, may have concealed some of the cross-national variability in fluidity, especially that arising from unusually rigid labor market institutions. By contrast, the increasingly popular literature on economic mobility (e.g., Corak 2013; Ermisch, Jäntti, and Smeeding 2012) shows far more appreciation of the extent of cross-national variation, with countries such as the U.S., Italy, and the U.K. consistently showing up as especially low in mobility. The purpose of our paper is to ask whether the "family resemblance" hypothesis within the sociological literature remains plausible in light of evidence from a single case, Mexico, that is seemingly well positioned to call it into question. Although most of the prior cross-national research on mobility rests on large multi-nation archives of data (e.g., Ishida and Miwa 2011), that standard approach induces the analyst to eschew detail and use summary measures of association in each country. We instead carry out a targeted approach that is more sensitive to the way in which extreme income inequality may affect fluidity. In carrying out our analysis, the U.S. will serve as the comparison case against which Mexican mobility may be calibrated, an approach that rests on the well-known result that, at least as regards class mobility, the U.S. regime is quite average and unexceptional (e.g., Erikson and Goldthorpe 1985; see also Xie and Killewald 2013; Long and Ferrie 2013).

The balance of our paper is divided into six sections. We first introduce the "income hypothesis," which posits a strong relationship between inequality and fluidity, and then discuss the mechanisms through which this hypothesis might be realized. After laying out that case, we then introduce the "top income hypothesis," a sympathetic revision of the income hypothesis that implies that rising inequality will target exchanges pertaining to the professional-managerial class. We then discuss why the case of Mexico is such an instructive one and bears such careful study. The remaining sections introduce the model, data, and analyses and discuss the implications of our results for the income hypothesis and the top income hypothesis.

The simple income hypothesis

We open this section by presenting well-known evidence on precisely how unequal Mexico is. As Figure 1 shows, Mexico is in fact more unequal than any other OECD country, including the U.S. This result holds even when the cash value of noncash services (e.g., education, health, social services) is additionally taken into account (see hashmarks). Because its inequality is so extreme, the case of Mexico may cast some light on the future of mobility in other countries, like the U.S., that are experiencing rapid takeoffs in inequality.

How is Mexico's mobility regime affected by the extremely unequal context within which it developed? It might be imagined that, given the ongoing takeoff in income inequality, a large body of research and theorizing has emerged exploring the implications for mobility of this especially dramatic shift in the resources attached to classes. This is surprisingly *not* the case. Whereas the effects of income inequality on income mobility are frequently discussed (Andrews and Leigh 2009; Corak 2013; Krueger 2012; OECD 2010; Solon forthcoming), its effects on class mobility have not been addressed as much as one might imagine. Insofar as the issue has been raised, the main argument has been that rising inequality provides privileged families with yet more resources that can then be lavished on their children, resources that raise their chances of securing desirable class positions for their children (e.g., Mitnik, Cumberworth, and Grusky 2013; Pollak et al. 2013). By this logic, inequality of condition and of opportunity are now understood as varying together, even though scholars have typically been at pains to stress that they are analytically distinct. ⁴

There is some relevant evidence on this point. In a recent analysis, Kornrich and Furstenberg (2013) have shown that privileged parents in the U.S. are increasingly investing in the human, cultural, and social capital of their children via high-quality childcare and preschool, educational toys and books, after-school training and test preparation, science-related summer camps, elite preparatory schools, prestigious college degrees, "finishing school" vacations in Europe and elsewhere, and stipends or allowances that free them from the need to work during high school and college. Within highly unequal societies, privileged parents can also more readily afford privileged residential neighborhoods, with accordingly improved access to high-quality public schools, neighborhood amenities that assist in human-capital formation (e.g., libraries), and peers that can provide all manner of career advantages (Durlauf, 1996; cf. Mayer 2001).

The latter behavioral responses are of course mainly relevant when children are still living with their parents or are still in college. Although we suspect, then, that younger children will especially benefit from the extra resources that privileged families command in highly unequal societies, we certainly cannot rule out the possibility that even older children will benefit. We can imagine that well-off parents in extremely unequal societies are more likely (a) to finance, via loans or gifts, a late-adult professional degree, or (b) to provide in-kind or direct economic support when their adult children are unemployed, support that then allows their children to maintain a high reservation wage (rather than settle quickly for a

lesser position). In some cases, such parents might also help their adult children pursue entrepreneurial opportunities by providing start-up resources, physical space, or implicit insurance in case of failure.

The preceding implies that, insofar as inequality and mobility *are* associated, it is perhaps because privileged children in high-inequality regimes are especially likely to attend college (especially elite colleges). The mechanisms that we've laid out above made frequent reference to schooling: We argued that privileged parents may use their extra infusion of money to assist their children in qualifying for elite colleges (e.g., investing in high-quality preschool), to assist them in paying for elite colleges, or to finance a recredentialling project when their children are unemployed. If the income hypothesis is indeed on the mark, it follows that the association between class origins and educational outcomes should be very strong in Mexico and other high-inequality societies (see Torche and Spilerman 2009; De Ferranti 2003; Daude 2012; Holm-Nielsen et al. 2005; Behrman et al. 2001; Binder and Woodruff 2002).

It is also relevant that extreme inequality may suppress the long-run growth of the college-going population. This matters because the size of that population affects the amount of mobility observed in a society. In a classic paper, Hout (1988) showed that the association between origin and destination withers away among college graduates, the implication being that educational upgrading shifts the population toward a low-association regime (see also Breen 2004; 2009; Vallet 2004; Beller and Hout 2006). As Torche (2011) has recently shown, the intergenerational association does not entirely wither away among advanced degree-holders, but even within this population it's relatively suppressed. In societies, such as Mexico, with a relatively small college-going population, the mobility regime will accordingly be less fluid because so few children are exposed to the association-reducing college treatment. Although there are a host of historical reasons why the college sector is comparatively small in Mexico, it is clear that extreme inequality has played a role by concentrating the demand for college among a small elite constituency that builds a self-reproducing system of higher education (see Holm-Nielsen et al. 2005).

The top income hypothesis

The foregoing lines of reasoning imply that Mexico's extreme inequality may have worked to reduce fluidity through a variety of mechanisms. Although the mechanisms are many, the presumed effects are straightforward. The simple income hypothesis implies a proportional stretching out of the inter-class gaps in family income that should make all types of exchange less common (see Mitnik, Cumberworth, and Grusky 2013; Pollak et al. 2011). By this interpretation, one expects to find the association between class origins and destinations to be uniformly stronger in Mexico than in the U.S., an expectation that may be labelled the "simple income hypothesis."

It is perhaps more plausible, however, that the effects of inequality will register principally within the upper regions of the class distribution. This modification of the simple income hypothesis is attractive because the income distributions for Mexico and the United States differ mainly at the very top. As Figure 2 shows, the bottom half of the income distributions are surprisingly similar, indeed the ratio of disposable income for the 50th and 10th percentiles is only slightly higher in Mexico (2.9) than in the U.S. (2.6). The corresponding 90-50 ratio, however, shows a much more dramatic difference, registering at 3.0 for Mexico and just 2.1 for the U.S. The implication is simple: If income inequality is indeed driving differences in mobility, we would expect its effects to register disproportionately in the odds ratios pertaining to the most privileged classes, such as professionals and managers. We refer to this second interpretation as the "top income hypothesis." ⁵

The mechanical distributional effect just discussed is not the only rationale for the top income hypothesis. It has long been argued that the professional-managerial class is especially oriented toward class reproduction and is therefore poised to exploit any additional resources for reproductive ends (e.g., Bourdieu and Passeron 1977). In the U.S., the professional-managerial class is not just represented as especially oriented toward and anxious about reproduction (if only for loss aversion reasons), but also especially skilled in realizing its agenda by choosing the right neighborhoods, buying high-quality preschool, purchasing after-school training, and otherwise engaging in "concerted cultivation" (Lareau 2003). The top income hypothesis thus suggests that, by virtue of increasing the resources at the disposal of professionals and managers, a highly unequal society works to realize their natural reproductive tendencies.

The methodological implication of this hypothesis is that the differences between Mexico and the U.S. should register most prominently in the odds ratios pertaining to the advantage of professionals and managers (relative to other classes). The simple income hypothesis directs us, alternatively, to average across all odds ratios, an approach that will blunt our capacity to detect difference insofar as the top income hypothesis is indeed on the mark. We will carry out analyses aimed at discriminating between these two hypotheses.

The case of Mexico

We address the foregoing issues by comparing Mexico to the U.S. Why focus on Mexico? It's not merely that Mexico is a large and affluent country of much intrinsic interest. For our purposes, a further rationale for studying Mexico is that it's more unequal than any other affluent country, hence it becomes a key test case for examining the income and top income hypotheses. Although these hypotheses might be explored by examining mobility trends within countries that are rapidly becoming more unequal (e.g., the U.S.), an obvious difficulty with such an approach is that the takeoff began too recently to examine its effects on adults who experienced it as children (but see Mitnik, Cumberworth, and Grusky 2013). These adults are accordingly too young to garner a full reading of how the takeoff may have

affected them. The case of Mexico thus plays a peculiarly useful role in revealing the implications of the various experiments with extreme inequality that are underway in so many countries.

It would of course be of great interest to examine trends in both class and income mobility within Mexico. Unfortunately, the main intergenerational survey within Mexico, the Mexican Social Mobility Survey (MSMS), hasn't included parental measures of income or earnings in either 2006 or 2011, thus making it impossible to calculate intergenerational elasticities or other measures of economic mobility in Mexico (see Grajales, Vázquez, and Wong 2013). Because these measures aren't available, scholars of Mexican mobility have focused mainly on the transmission of wealth, education, or socioeconomic status (e.g., Grajales, Vázquez, and Wong 2013; Behrman and Vélez-Grajales 2012; Serrano and Torche 2010; Azevedo and Bouillon 2009; Torche and Spilerman 2009; Behrman, Gaviria, and Székely 2001).

Important though such evidence is, most sociologists and many social scientists regard measures of social class as a gold standard in assessing the intergenerational transmission of advantage, a claim that's founded on the view that class is an omnibus measure of (a) skills and credentials, (b) earning capacity, (c) social contacts and friendships, (d) prestige and social worth, (e) career trajectory and opportunities, (f) politics and attitudes, and (g) even consumption practices and leisure activities. We care, in other words, about classes because they are pregnant with information about an individual's life chances and lifestyles (see Weeden and Grusky 2005). The (largely untested) bias in this regard is that social class is far more strongly correlated with these various variables than is education, income, wealth, and all other measures of social position.

We will thus be building here on an already well-developed body of work on class mobility in Mexico (Grajales, Vázquez, and Wong 2013; Behrman and Vélez-Grajales 2012; Torche 2007; Solís 2007; Zenteno and Solís 2006; Cortés, Escobar-Latapí, and Solís 2007; Cortés and Latapí 2005). Although there's much existing research on class mobility, we hope to contribute to this literature by (a) fitting a model that's tailor made to teasing out the effects of extreme inequality, and (b) carrying out an explicit comparison with the U.S. and thereby establishing whether the Mexican case requires us to revise the long-standing view that late-industrial mobility regimes evince a strong family resemblance. Because so much is known about U.S. mobility (and how it differs from mobility elsewhere), this comparative approach allows us to locate Mexican mobility within the cross-national landscape of mobility patterns. If the Mexican case does prove to be distinctive, we will then examine whether such distinctiveness is consistent with either the simple or top income hypotheses.

Modeling mobility and immobility

We will rely throughout on an 82-category occupational classification that captures the socially defined boundaries in the division of labor at the "micro class" level (see Jonsson et al.

2009). The micro-class category may be defined as "a grouping of technically similar jobs that is institutionalized in the labor market through such means as (a) an association or union, (b) licensing or certification requirements, or (c) widely diffused understandings ... regarding efficient or otherwise preferred ways of organizing production and dividing labor" (Grusky 2005, p. 66). Although some compromises in the coding protocol were required because of considerations of sample size, there is much evidence that, despite all such compromises, micro-class schemes of this sort capture some of the most profound institutional boundaries in the labor market (see Weeden and Grusky 2005). The full 82-category scheme is presented in Figure 3, described in further detail in Jonsson et al. (2009), and implemented with the protocol laid out in www.classmobility.org. We will be using the micro classes of Figure 3 not just in their original categorical form but also after scaling them with the Nakao-Treas prestige scale (Nakao and Treas 1992). 6

We next aggregate our 82 micro-classes into a big-class scheme. Because there are so many competing big-class models, we are disinclined to rely exclusively on any one of them, and instead our preference is to build a hybrid classification that represents the many and varied distinctions adopted in the most popular class models. We thus begin, perhaps predictably enough, by distinguishing between the manual and nonmanual sectors, arguably one of the core barriers in contemporary labor markets. We then further distinguish three macro classes within the nonmanual sector (i.e., professional-managerial, proprietor, routine nonmanual) and another two macro classes within the manual sector (i.e., manual, primary). Finally, these macro classes are themselves subdivided into meso classes, yielding such categories as classical professions, sales workers, and craft workers. By applying this approach, we can determine whether immobility at the top of the class structure is indeed more prominent in Mexico than in the U.S., just as the top income hypothesis would have it.

These three types of big-class effects will also be layered over parameters that capture reproduction at the micro-class and gradational levels. This overlapping parameterization makes it possible to not only isolate trends at different big-class levels but also to distinguish such big-class trends from those operating at the micro-class or gradational levels. The father-to-child mobility table in Figure 4 depicts this full set of overlapping parameters and demonstrates how they capture affinities off the micro-class diagonal, the meso-class diagonal, and even the macro-class diagonal. The white zones of Figure 1 are the only ones that identify mobility with respect to *all* class levels, although even the cells in these zones will be modeled with our gradational term, a term that reflects the extent to which short-distance moves occur more frequently than long-distance ones. The resulting model provides, then, a comprehensive accounting of the types of mobility and reproduction that might plausibly differ across countries.

It is especially important to purge out cross-national differences in micro-class reproduction because they are likely to be responsive to forces other than income inequality. In particular, micro-class reproduction is rooted mainly in family processes, including the intergenerational transmission of very specialized aspirations, skills, and networks. This type

of transmission doesn't differ all that much across countries (see Jonsson et al. 2009). The children born, for example, into a family of professors are presumably just as likely in Mexico as in the U.S. to be exposed to (a) a family culture that engenders a special taste for autonomy, creativity, and other hallmarks of the professorial class (i.e., aspirational transmission), (b) a universalistic and critical style of argumentation, writing, and reasoning that will serve them well in becoming professors (i.e., skill transmission), and (c) the social networks that provide them with information, contacts, and even overt preference that advantages them in the competition for professorial training and jobs (i.e., network transmission). If Mexico is more familistic than the U.S., as has long been argued (Bronfenbrenner 1979), it's possible that these forces for family-based transmission are somewhat exaggerated in Mexico, thus raising the amount of micro-class reproduction. For our purposes, what matters most is that this type of reproduction is not likely responsive to differences in the amount of income inequality, thereby making it important to distinguish it from other types of reproduction that are more plausibly related to income inequality.

The resulting model accordingly includes parameters for gradational, big-class, and micro-class reproduction. It takes the following form in each country:

$$m_{ij} = \alpha \beta_i \gamma_j \varphi^{u_i u_j} \delta^A_{ij} \delta^B_{ij} \delta^C_{ij} \delta^M_{ij} \tag{1}$$

where i indexes origins and j destinations, m_{ij} refers to the expected value in the ij^{th} cell, α refers to the main effect, β_i and γ_j refer to row and column marginal effects, φ refers to the gradational effect, μ_i (origin) and μ_j (destination) are the prestige values assigned to each of the 82 micro-classes, and δ^A , δ^B , δ^C , and δ^M refer to manual-nonmanual, macro-class, mesoclass, and micro-class immobility effects respectively. The latter parameters are fit simultaneously and therefore capture net effects. The manual-nonmanual parameter, for example, reflects the average density across the cells pertaining to manual or nonmanual inheritance after purging the additional residue of inheritance that may obtain at the macro-class, meso-class, and micro-class levels (see Herting et al. 1997). The prestige parameter, φ , captures the tendency of offspring to assume an occupation that is close to their origin occupation. If this parameter is omitted, a simple tendency for gradational clustering may show up misleadingly as a type of class reproduction.

The data from Mexico are drawn from the 2006 and 2011 MSMS (i.e., Mexican Social Mobility Surveys), while the data from the U.S. are drawn from the the 1962 Occupational Changes in a Generation (OGG) survey, the 1973 OCG survey, and the 1972-2010 General Social Surveys (GSS). These surveys provide information on father's occupation, respondent's occupation (at the time of the survey), age, industry, and other variables that aid in occupational and big-class coding (e.g., employment status). Because our analyses are pitched at the detailed occupational level, our father-by-respondent mobility tables will have many cells, and relatively large data sets are accordingly needed. We have met this requirement by pooling the two MSMS surveys within Mexico and by pooling the two OCG

surveys and the full set of GSS surveys within the U.S. The U.S. data of course reach back to an earlier point in time than the Mexican data. By allowing this incongruency, we can exploit all available data from the U.S., and we can additionally represent the U.S. in its "classical" pre-takeoff form. This classical form, which is quite similar to that appearing in other affluent countries, can then be used to gauge whether mobility in Mexico departs at all from the crossnational norm for affluent countries. It should be added that, because recent trends in U.S. mobility are rather subtle (Mitnik, Cumberworth, and Grusky 2013), the results presented here are not much affected by our decision to pool the U.S. data.

When the sample is restricted to men between the ages of 30 and 64 (inclusive), we are left with 6,621 cases in Mexico and 46,085 cases in the United States, a sample size that is acceptably large (under conventional rules of thumb) to proceed with our highly disaggregated analyses. The age restriction serves to ensure that almost all of our respondents have completed schooling, whereas the gender restriction can only be defended as consistent with the convention in much of the cross-national mobility literature (but see Torche 2013 for an analysis of gender differences in mobility in Mexico). Unfortunately, neither of the two OCG surveys ascertain the mother's occupation, thus obliging us to represent the family's class position in terms of the father's occupation alone. Again, this decision renders us consistent with standard practice among scholars of class mobility, even though it cannot easily be reconciled with evidence on the relatively strong effects of mother's occupation (Beller 2009). The upshot is that we have opted for a wholly conventional mobility analysis because doing so ensures that we can replicate the standard results and then assess how Mexican mobility compares as against those results.

The experience of mobility

As a precursor to modeling the association between origins and destinations, we first report gross immobility rates at four levels of aggregation, each presented separately for Mexico and the U.S. The statistics in Figure 5 pertain to the percentage of total observations that fall on the main diagonal of (a) a 2×2 manual-nonmanual table (i.e., sectoral immobility), (b) a 5×5 macro-class table, (c) a 10×10 meso-class table, and (d) an 82×82 micro-class table.

We can draw two conclusions from Figure 5. The first and most obvious is that the amount of immobility declines as the mobility table is disaggregated. There is, for example, about three times more sectoral immobility than micro-class immobility in Mexico (with the corresponding ratio in the U.S., 6.5, yet more stark). It follows that the manual-nonmanual barrier is only rarely crossed, whereas more disaggregate class barriers are more frequently crossed. This conclusion is a necessary feature of disaggregation in the sense that the model of independence will always generate more immobility in aggregated tables.

For our purposes, the more important conclusion is that Mexico shows up as a highly immobile society, a result that holds across all types of mobility. The disparity between the two countries is nonetheless especially prominent at the lower levels of aggregation. As

Figure 5 reveals, the disparity in manual-nonmanual immobility is just 9 points, whereas it increases to 15 points for meso-class immobility and to 14 points for micro-class immobility. These results make it clear that, when it comes to objective experiences, Mexican men are much more likely than U.S. men to remain in their class of origin.

Is this result attributable to the size of the farming sector in Mexico? Because the farming sector is characteristically a zone of high immobility, and because this sector is approximately twice as large in Mexico as in the U.S., we might expect the disparity between the countries to be substantially reduced within the nonfarm population. This proves not to be the case. As shown in Figure 6, the disparities within the nonfarm population remain quite intact, although they are reduced somewhat for sectoral and micro-class immobility. At least among men, we're left with the conclusion that mobility is a far less common experience in Mexico than in the U.S., even within the nonfarm sector.

Important as such felt experiences are, we also want to know whether *opportunities* for mobility are becoming more or less equal. The results presented in Figures 5 and 6 simply cannot speak to that question. Indeed, the relative sizes of classes differ across the two countries, as do rates of intergenerational change in those relative sizes. These differences must be parsed out to speak to issues of fluidity and opportunity. It is only by estimating relative rates, to which we next turn, that we can speak to the inequality of opportunity expressed in a mobility table (i.e., "social fluidity").

There are in fact two types of controls that must be imposed. As just noted, we must first net out the effects of class size, as mobility rates are of course a function of size (and changes therein). We should, however, additionally tease out the net residual of immobility at each level of aggregation (i.e., manual-nonmanual, macro, meso, micro, gradational). It is possible, for example, that Mexican immobility rates show up as so high (in Figures 5 and 6) wholly because micro-class reproduction is exaggerated in Mexico, a result that, if found, is more plausibly a consequence of Mexican familism than inequality.

Social fluidity

It is useful to begin our formal modeling by fitting a conventional mobility model that does *not* distinguish between these different types of reproduction. We begin, then, by fitting a model with 10 immobility coefficients, one for each of our 10 meso classes. We further allow the strength of such meso-class reproduction to vary freely across the two countries. The resulting specification is equivalent to fitting the model of Equation 1 (in each country) after omitting the parameters φ , δ^A , δ^B , and δ^M . The fit statistics for this trimmed model are reported in Table 2, and the immobility effects for each country are presented in Figure 7.

The most striking result coming out of Figure 7 is that, for all but one social class (farming), the point estimates are larger in Mexico than the U.S. Although these results are in rough accord with those of Figures 5 and 6, we can now reject the claim that differences in class sizes (or in the rate of change in class sizes) create the appearance of high immobility in

Mexico. It also bears noting that, consistent with the top income hypothesis, the most prominent inter-country differences show up among the privileged classes. The estimates imply, for example, that the offspring of Mexican managers are 15.6 times more likely to be immobile than mobile, whereas the offspring of U.S. managers are only 2.3 times more likely to be immobile. Among professional and proprietors, the inter-country differences are somewhat less extreme, but they are still very prominent. In all other classses, the propensities for immobility are more nearly similar across the two countries, indeed for three of the lower classes (i.e., sales, clerical, farm) the inter-country difference is not even significant. These results are consistent with the top income hypothesis.

We have suggested, however, that strong familism in Mexico could generate correspondingly strong micro-class reproduction and create the misleading appearance of excessive big-class reproduction. This hypothesis can be addressed by fitting the full model of Equation 1. When that full model is estimated, the number of immobility parameters increases from 10 to 97, and we're accordingly obliged to place at least some constraints on how those parameters vary across countries. In our first model, we fit a single shift effect for each type of immobility (gradational, sectoral, macro-class, meso-class, micro-class), with the implication that cross-national variability is summarized in just five parameters. This is of course a very aggressive parameterization and in fact proves to be distorting in various ways. In our relaxed model, we accommodate the most important deviations from a simple shift effect by (a) allowing each of the five macro-class immobility parameters to freely vary across country, (b) fitting a special shift effect for classical professions, and (c) fitting a special shift effect for farm owners.

The fit statistics for these two models are presented in Table 1. The parameter estimates for both models are presented in Table 2, and the key estimates from the relaxed model are graphed in Figure 8. When the coefficients from the simple shift effect model are examined (see Table 2), one finds that macro-class immobility is 1.4 times stronger in Mexico than the U.S. ($e^{.31} = 1.4$), while meso-class immobility is 1.2 times stronger in Mexico than the U.S ($e^{.17} = 1.2$). The estimates for this model reveal that, consistent with the constraints of the model, the inter-country difference is equal in size for all parameters pertaining to each type of reproduction.

Although this constraint fits reasonably well, our inspection of the unconstrained estimates revealed some deviations of consequence, deviations that are of special interest to us because they speak directly to the top income hypothesis. These deviations are embodied in our relaxed model. Under this model, we find that macro-class immobility is very prominent at the top of the Mexican class structure, especially among proprietors but also among professional and managers. By contrast, the macro-class estimates for the middle of the class structure are small and don't differ much across countries, while the estimate for primary workers is very large but again doesn't differ much across countries. This pattern of results, which is consistent with the top income hypothesis, was concealed by the simpler shift effect.

The meso-class estimates from the relaxed model reveal a similar pattern. It is especially striking that immobility among classical professions is much higher within Mexico than the U.S. The model implies that, net of all other types of immobility, a Mexican child born into the classical professions is 4.3 times more likely to remain in the classical professions than to exit them ($e^{1.46} = 4.3$), whereas the corresponding estimate for the U.S. registers at only 1.3 ($e^{.25} = 1.3$). The remainder of the meso-class parameters are much the same for Mexico and the U.S.

What about the micro-class parameters? As we suspected might be the case, there is more micro-class immobility in Mexico than the United States, but the difference is relatively slight. In all occupations (save farm owners), a son in Mexico is 1.4 times more likely than a son in the U.S. to remain within his micro-class of origin (e^{.37}=1.4), a difference that *could* be interpreted as the effect of Mexican familism. Insofar as children in Mexico face especially strong pressures to meet parental expectations, more of them will likely opt to carry on with the family occupation, with the result being slightly higher immobility parameters at the detailed micro-class level (e.g., Germán, Gonzales, and Dumka 2009).

The overall pattern of results under the relaxed model comes out especially clearly in Figure 8. This figure shows that, at the micro-class level, the differences between Mexico and the U.S. aren't all that prominent (save among farm owners). By contrast, the meso-class and macro-class parameters for the upper classes are much stronger in Mexico than in the U.S., which is consistent with the top income hypothesis.

Is there any silver lining for those rooting for Mexican fluidity? It might seem as if there is. As Figure 8 reveals, the estimate for sectoral immobility is in fact *weaker* in Mexico than in the U.S., a result that contrasts with the excess rigidity found elsewhere in the Mexican mobility regime. This sectoral estimate, which implies that long-distance mobility is more common in Mexico, may be understood as a natural outcome of erecting so many barriers to short-distance mobility. The child born into privilege who is unable to successfully exploit the very favorable institutional circumstances in Mexico is likely to be quite deficient and hence likely to fall far. Obversely, disadvantaged children face unusually stiff mobility-precluding barriers in Mexico, but insofar as they beat the odds and break through those barriers they are likely to be exceedingly special and to accordingly traverse a long distance. If this interpretation is on the mark, it implies that the weak sectoral parameter, far from being a bragging point, is instead but a manifestation of a regime in which mobility can only occur in circumstances of unusually high capacity or incapacity.⁸

The meaning of the Mexican case

We led off by asking whether scholars of class mobility should reconsider the prevailing view that a basic "family resemblance" in the amount and pattern of social fluidity can be found in late-industrial market economies (Erikson and Goldthorpe 2002; 1992). The

results reported here suggest that indeed that view is difficult to sustain in light of the extreme rigidities found in Mexico.

The best available evidence (e.g., Breen 2004, pp. 59-60) shows that the most rigid societies (Germany, France, and Ireland) are approximately twice as rigid as the least rigid ones (e.g., Israel). Although differences of this order of magnitude are, to our mind, already too substantial to warrant the indifference of most mobility scholars, we have now found yet more extreme cross-national variation in the uppermost reaches of the class structure, variation that surely isn't any longer ignorable. Under our simplest meso-class model (see Figure 7), the offspring of Mexican managers are 15.6 times more likely to be immobile than mobile, whereas the offspring of U.S. managers are only 2.3 times more likely to be immobile. We likewise find that, when our full multiplicative model is estimated, Mexico proves to be quite rigid at the top of the class structure (see Figure 8). These results accord well with Torche's (2005) research on reproduction among the Chilean upper class.

Why has the field been so transfixed by a seemingly misleading narrative about a "family resemblance" in mobility regimes? Perhaps most importantly, there has long been a Eurocentric cast to the field, a cast that may be attributed only in part to the difficulty of securing non-European data. We don't mean to suggest that Europe is a social democratic zone of relatively high fluidity and that elsewhere in the world there is reliably less fluidity. There is in fact much evidence to suggest otherwise (e.g., Ganzeboom, Luijkx, and Treiman 1989). Rather, our point is the simpler one that there are at least *some* countries outside of Europe, such as Mexico, that have mobility regimes that are quite rigid. If near caste-like conditions can coexist with modern institutional forms, it surely doesn't comport well with the view that there's a basic family resemblance in contemporary mobility regimes. It is instead seemingly quite straightforward to graft high-reproduction institutions onto that modern form.

The upshot is that the "family resemblance" story has appealed to scholars in part because the data sets with which they initially worked happened not to include highly rigid countries. But that's not the only source of the story's appeal. It is also relevant that the featured models within this field rely on heavy smoothing (e.g., shift-effect association models) and thus work to suppress cross-national variability in the data. These models are of course especially attractive when scholars are analyzing a large number of countries and are thus keen on summarizing differences in a tractable number of parameters. In their now-classic study of 35 countries, Ganzeboom, Luikjx, and Treiman (1989) were able to formally reject the claim that fluidity is cross-nationally invariant, but despite that key result they didn't discuss in much detail the cross-national differences that were detected. If they were relatively unimpressed with the amount of variability, it is likely because their aggressive smoothing precluded them from uncovering the more extreme variability that, we suspect, would have shown up had they focused on upper-class reproduction.

This is of course but a hypothesis on our part. We've established that reproduction assumes caste-like proportions among Mexican upper-class men, but we don't yet know if

that same pattern obtains for women in Mexico or men and women in other countries (but see Torche 2005). Although our top income hypothesis has, admittedly, barely been tested as yet, we are optimistic that it will ultimately find support because the mechanisms behind it are so plausible. The simple rationale: If the benefits of extreme inequality go mainly to the upper classes (see Atkinson, Piketty, and Saez 2011), then the effects of that inequality will register disproportionately in the odds ratios pertaining to those classes (e.g., professionals, managers, proprietors). Moreover, the professional-managerial sector is conventionally represented as fine-tuned for the purpose of "concerted cultivation" of their offspring (Lareau 2003), with the implication that its extra income will be disproportionately channeled to reproductive ends. The top income hypothesis thus suggests that, by increasing the resources at the disposal of professionals and managers, a highly unequal society works to realize their natural reproductive tendencies.

The data presented here are consistent, then, with the top income hypothesis, but they are also consistent with any number of alternative hypotheses about the sources of extreme rigidity in Mexico. We have sought to eliminate the alternative familism hypothesis by purging the excess micro-immobility that is generated when children cathect to their parent's very detailed pursuits. Even after that family-based immobility is purged, we still find extreme reproduction at the top, a result that's at least consistent with the top income hypothesis. We hope that yet more precise tests of this hypothesis can be devised in the future.

It is important to turn to such tests because they help us understand how mobility regimes may be evolving throughout the world. If inequality and mobility are indeed related as the top income hypothesis implies, then the Mexico case provides a possible window into the future of mobility in other countries, such as the U.S., that are running their own experiments with extreme inequality.

References

Andrews, Dan and Andrew Leigh. 2009. "More Inequality, Less Social Mobility." *Applied Economics Letters* 16(15):1489–92.

Atkinson, Anthony B., Thomas Piketty, and Emmanuel Saez. 2011. "Top Incomes in the Long Run of History." *Journal of Economic Literature* 49:1, pp. 3-71.

Azevedo, Viviane and César P. Bouillon. 2009. "Social Mobility in Latin America: A Review of Existing Evidence." Inter-American Development Bank, Working Paper #689.

Behrman, Jere R., Alejandro Gaviria, and Miguel Székely. 2001. "Intergenerational Mobility in Latin America. *Economia* (Fall, 2001), pp. 1-44.

Behrman, Jere R., and Viviana Vélez-Grajales. 2012. "Intergenerational Wealth, Educational, and Occupational Mobility in Mexico." Working Paper, CEEY Project on Social Mobility.

Beller, Emily. 2009. "Bringing Intergenerational Social Mobility Research Into the Twenty-First Century: Why Mothers Matter." *American Sociological Review* 74(4), pp. 507-28.

Beller, Emily and Michael Hout. 2006. "Intergenerational Social Mobility: The United States in Comparative Perspective." *The Future of Children* 16(2), pp. 19-36.

Binder, Melissa, and Christopher Woodruff. 2002. "Inequality and Intergenerational Mobility in Schooling: The Case of Mexico." *Economic Development and Cultural Change* 50(2), pp. 249-67.

Bourdieu, Pierre and Jean-Claude Passeron. 1977. *Reproduction in Education, Society, and Culture*. London: Sage Publications.

Breen, Richard (ed.). 2004. Social Mobility in Europe. Oxford: Oxford University Press.

Breen, Richard, Ruud Luijkx, Walter Müller, and Reinhard Pollak. 2009. "Nonpersistent Inequality in Educational Attainment: Evidence from Eight European Countries." *American Journal of Sociology* 114(5), pp. 1475-1521.

Bronfenbrenner, U. 1979. *The Ecology of Human Development: Experiments by Nature and Design*. Cambridge, MA: Harvard University Press.

Corak, Miles. 2013. "Inequality from Generation to Generation: The United States in Comparison." Pp. 107-26 in *Economics of Inequality, Poverty and Discrimination in the 21st Century,* Volume I, edited by Robert S. Rycroft. Santa Barbara, CA: ABC-Clio Publishers (also http://milescorak.files.wordpress.com/2012/01/inequality-from-generation-to-generation-the-united-states-in-comparison-v3.pdf).

Cortés, Fernando, and Agustín Escobar Latapí. 2005. "Intergenerational Social Mobility in Urban Mexico." *Cepal Review* 85, pp. 143-160.

Cortés, Fernando, Augustín Escobar, and Patricio Solís. 2007. *Cambio Estructural y Movilidad Social en México*. México, D.F.: Colegio de México.

Daude, Christian. 2012. "Educación, Clases Medias y Movilidad Social en Améica Latina." *Pensamiento Iberoamericano* 10, pp. 29-48.

De Ferranti. 2003. "Inequality in Latin America and the Caribbean: Breaking with History?" World Bank Latin American and Caribbean Studies. Washington, D.C.: The World Bank.

Durlauf, Steven N. 1996. "A Theory of Persistent Income Inequality." *Journal of Economic Growth* 1(1), pp. 75–93.

Erikson, Robert, and John H. Goldthorpe 1985. "Are American Rates of Social Mobility Exceptionally High?" European Sociological Review 1 (1), pp. 1-22.

Erikson, Robert, and John H. Goldthorpe. 1992. *The Constant Flux: A Study of Class Mobility in Industrial Societies*. Clarendon Press: Oxford.

Erikson, Robert, and John H. Goldthorpe. 2002. "Intergenerational Inequality: A Sociological Perspective." *Journal of Economic Perspectives* 16(3), pp. 31-44.

Ermisch, J., M. Jäntti, and T. M. Smeeding (eds.). 2012. From Parents to Children: The Intergenerational Transmission of Advantage. New York: Russell Sage Foundation.

Ganzeboom, Harry B.G., Ruud Luijkx, and Donald J. Treiman. 1989. "Intergenerational Mobility in Comparative Perspective." *Research in Social Stratification and Mobility* 8, pp. 3-84.

Germán, Miguelina, Nancy A. Gonzales, and Larry Dumka. 2009. "Familism Values as a Protective Factor for Mexican-Origin Adolescents Exposed to Deviant Peers." *The Journal of Early Adolescence* 29(1), pp. 16-42.

Grajales, Roberto Vélez, Raymundo M. Campos Vázquez, and Juan Enrique Huerta Wong. 2013. *Informe de Movilidad Social en México 2013*, CEEY, El Colegio de México.

Goodman, Leo. 1979. "Multiplicative Models of the Analysis of Mobility Tables and Other Kinds of Mixed-Classification Tables." *American Journal of Sociology* 84(4), pp. 804-819.

Grusky, David B., and Robert M. Hauser. 1984. "Comparative Social Mobility Revisited: Models of Convergence and Divergence in Sixteen Countries." *American Sociological Review* 49, pp. 19-38.

Grusky, David B. 2005. "Foundations of a neo-Durkheimian Class Analysis." Pp. 51-81 in Erik Olin Wright (ed.), *Approaches to Class Analysis*. Cambridge: Cambridge University Press. Holm-Nielsen, L.B. 2005. "Internationalization of Higher Education in Latin America." *Directions in Development*. Washington, D.C.: The World Bank.

Ishida, Hiroshi, and Satoshi Miwa. 2011. "Comparative Social Mobility and Late Industrialization." Working paper, Center for Research on Inequalities and the Life Course, Yale University.

Jonsson, Jan O., David B. Grusky, Matthew Di Carlo, Reinhard Pollak, and Mary C. Brinton. 2009. "Micro-Class Mobility: Social Reproduction in Four Countries." *American Journal of Sociology*.

Kerbo, Harold. 2002. Social Stratification and Inequality. New York: McGraw-Hill.

Kim, Chang Hwan and Arthur Sakamoto. 2008. "The Rise of Intra-Occupational Wage Inequality in the United States, 1983 to 2002." *American Sociological Review* 73(1):129-57.

Kornrich Kornrich, Sabino and Frank Furstenberg. 2013. "Investing in Children: Changes in Parental Spending on Children, 1972 to 2007." *Demography* 50(1):1-23.

Krueger, Alan. 2012. "The Rise and Consequences of Inequality in the United States." Presented to the Center for American Progress, January 12, Washington, D.C. (www.americanprogress.org/events/2012/01/pdf/krueger.pdf).

Lareau, Annette. 2003. *Unequal Childhoods: Class, Race, and Family Life.* Berkeley, CA: University of California Press.

Long, Jason, and Joseph Ferrie. 2013. "Intergenerational Occupational Mobility in Great Britain and the United States Since 1850." *American Economic Review* 103 (4): 1109-37.

Mayer, Susan. 2001. "How Did the Increase in Economic Inequality between 1970 and 1990 Affect Children's Educational Attainment?" *American Journal of Sociology* 107(1), pp. 1–32.

Mitnik, Pablo, Erin Cumberworth, and David Grusky. 2013. "Social Mobility in a High Inequality Regime." Working Paper, *Stanford Center on Poverty and Inequality*.

Mouw, Ted and Arne Kalleberg. 2010. "Occupations and the Structure of Wage Inequality in the United States, 1980s to 2000s." *American Sociological Review* 75(3):402-31. Nakao, Keiko, and Treas, Judith. 1992. "The 1989 Socioeconomic Index of Occupations: Construction from the 1989 Occupational Prestige Scores." GSS Methodological Report No. 74. Chicago: NORC.

OECD (Organisation for Economic Co-operation and Development). 2010. "A Family Affair: Intergenerational Social Mobility across OECD Countries." Pp. 181-98 in *Economic Policy Reforms: Going for Growth*. Paris: OECD Publishing.

Park, Hyunjoon and Jongchun Cha. 2008. "Trends in Intergenerational Social Mobility across Four Cohorts in South Korea." *Social Stratification and Social Mobility in Late-Industrializing Countries*, edited by Hiroshi Ishida. The 2005 SSM Research Series, Volume 14.

Pollak, Reinhard, Jonsson, Jan O., and David B. Grusky. 2013. "Trends in U.S. Social Mobility." Working Paper. Stanford Center on Poverty and Inequality.

Serrano, Julio, and Florencia Torche (eds.). 2010. *Movilidad Social en México. Población, Desarrollo y Crecimiento*. Centro de Estudios Espinosa Yglesias.

Solon, Gary. Forthcoming. "Theoretical Models of Inequality Transmission Across Multiple Generations." *Research in Social Stratification and Mobility*.

Torche, Florencia. 2005. "Unequal but Fluid: Social Mobility in Chile in Comparative Perspective." *American Sociological Review* 70, pp. 422-50.

Torche, Florencia. 2007. "Cambio y Persistencia de la Movilidad Intergeneracional en México. Chapter 6, *Movilidad Social en México: Población, Desarrollo y Crecimiento Económico*, edited by J. Serrano and F. Torche. México DF: CEEY.

Torche, Florencia. 2011. "Is a College Degree Still the Great Equalizer? Intergenerational Mobility across Levels of Schooling in the United States." *American Journal of Sociology* 117(3), pp. 763-807.

Torche, Florencia, and Seymour Spilerman. 2009. "Intergenerational Influences of Wealth in Mexico." *Latin American Research Review* 44(3), pp. 75-101.

Vaid, Divya. 2007. "An Empirical Exploration of the Relationship between Caste, Class, and Mobility in India." Working paper, Dept. of Sociology, Yale University.

Vallet, Louis-André. 2004. "Change in Intergenerational Class Mobility in France from the 1970s to the 1990s and its Explanation: An Analysis Following the CASMIN approach." Pp. 115-148 in *Social Mobility in Europe*, edited by Richard Breen. Oxford: Oxford University Press.

Vázquez, Raymundo M. Campos, Wong, Juan Enrique Huerta, Grajales, Roberto Vélez. 2013. Informe de Movilidad Social en México 2013. Comité Permanente de Movilidad Social del Ceey.

Xie, Yu. 1992. "The Log-Multiplicative Layer Effect Model for Comparing Mobility Tables." *American Sociological Review* 57(3), pp. 380-95.

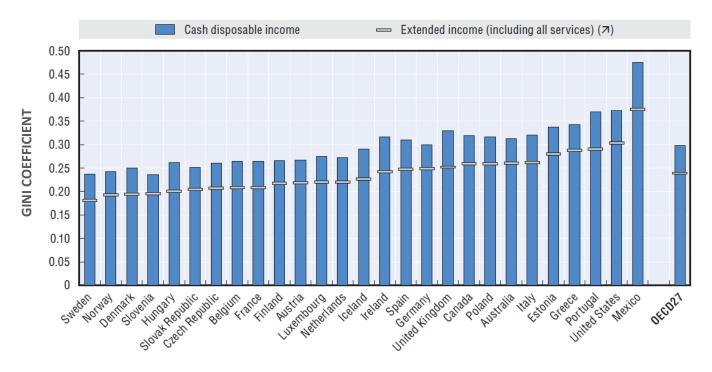
Xie, Yu, and Alexandra Killewald. 2013. "Intergenerational Occupational Mobility in Great Britain and the United States Since 1850: A Comment." *American Economic Review* 103 (5), pp. 2003-20.

Weeden Kim A. and David B. Grusky. 2005. "The Case for a New Class Map." *American Journal of Sociology* 111:141-212.

Weeden, Kim, Young-Mi Kim, Matthew Di Carlo, and David Grusky. 2007. "Social Class and Earnings Inequality." *American Behavioral Scientist* 50(5):702-36.

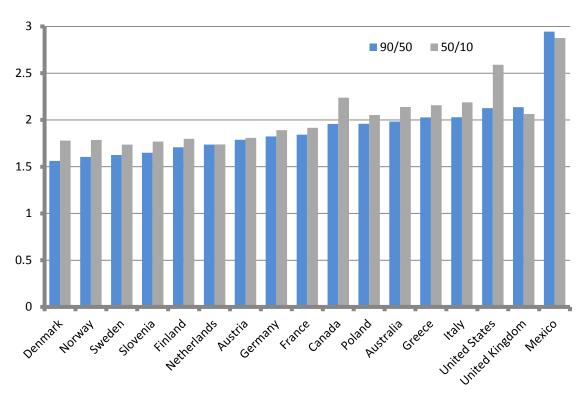
Zenteno, René, and Patricio Solís. 2006. "Continuidades y Discontinuidades de la Movilidad Ocupacional en México." *Estudios Demográficos y Urbanos* 21 (3), pp. 515-46.

Figure 1. Cross-national variation in household disposable income and extended income (reflecting noncash transfers from public services)



Source: OECD. 2011. Divided We Stand: Why Inequality Keeps Rising. Chapter 8, Table 8.2.

Figure 2. Disposable household income distribution for selected countries in the mid-2000s (90-50 and 50-10 ratios)



Note: Disposable household income is market income (e.g., earnings, self-employment income, pensions, rent, and dividends) plus public transfer payments (e.g., old-age and unemployment service, matgernity and family support) less personal income tax payments and workers' social security contributions, adjusted for size of household. The source is the Luxembourg Income Study (LIS), Inequality Key Figures, http://www.lisdatacenter.org.

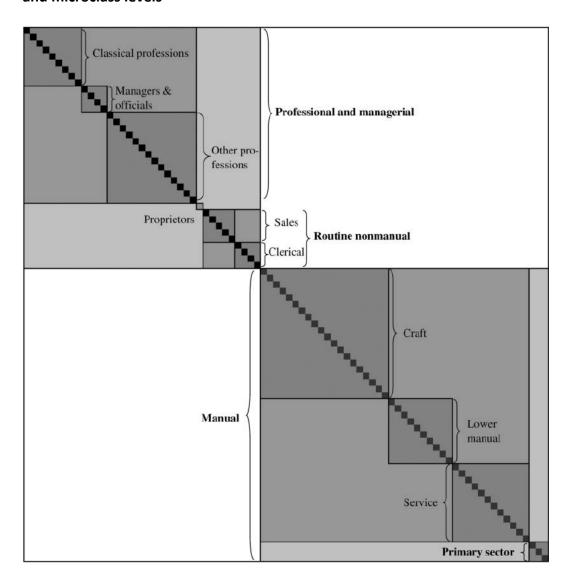
Figure 3. Schematic of macroclass, mesoclass, and microclass schemes

Macroclasses	MESOCLASSES	Microclasses				
Nonmanual Class						
I. Professional-managerial	A. Classical professions	1. Jurists				
		2. Health professionals				
		3. Professors and instructors				
		4. Natural scientists				
		Statistical and social scientists				
		6. Architects				
		7. Accountants				
		8. Authors and journalists				
		9. Engineers				
	B. Managers and officials	Officials, government and non- profit organizations				
		2. Other managers				
		3. Commerical managers				
		4. Building managers and proprietors				
	C. Other professions	1. Systems analysts and programmers				
		2. Aircraft pilots and navigators				
		3. Personnel and labor relations workers				
		Elementary and secondary school teachers				
		5. Librarians				
		6. Creative artists				
		7. Ship officers				
		8. Professional and technical, NEC				
		9. Social and welfare workers				
		10. Workers in religion				
		11. Nonmedical technicians				
		12. Health semiprofessionals				
		13. Hospital attendants				
		14. Nursery school teachers and				
		aides				
II. Proprietors		1. Proprietors				
III. Routine nonmanual	A. Sales	1. Real estate agents				
		2. Agents, NEC				
		3. Insurance agents				
		4. Cashiers				
		5. Sales workers				
	B. Clerical	1. Telephone operators				
		2. Bookkeepers				
		3. Office workers				
		4. Postal clerks				

Figure 3 (cont.)

Manual Class					
I. Manual	A. Craft	1. Craftsmen, NEC			
		2. Foremen			
		3. Electronics service and repair			
		4. Printers and related workers			
		5. Locomotive operators			
		6. Electricians			
		7. Tailors and related workers			
		8. Vehicle mechanics			
		9. Blacksmiths and machinists			
		10. Jewelers			
		11. Other mechanics			
		12. Plumbers and pipe fitters			
		13. Cabinetmakers			
		14. Bakers			
		15. Welders			
		16. Painters			
		17. Butchers			
		18. Stationary engine operators			
		19. Bricklayers and carpenters			
		20. Heavy machine operators			
		20. Heavy machine operators			
	B. Lower manual	1. Truck drivers			
		2. Chemical processors			
		3. Miners and related workers			
		4. Longshoremen			
		5. Food processing workers			
		6. Textile workers			
		7. Sawyers			
		8. Metal processors			
		Operatives and related, NEC			
		10. Forestry workers			
	C. Service workers	1. Protective service workers			
		2. Transport conductors			
		3. Guards and watchmen			
		4. Food service workers			
		5. Mass transportation operators			
		6. Service workers, NEC			
		7. Hairdressers			
		8. Newsboys and deliverymen			
		9. Launderers			
		10. Housekeeping workers			
		11. Janitors and cleaners			
		12. Gardeners			
II. Primary		1. Fishermen			
11. I Illiary		2. Farmers			
		B. 2 (1111010			
		3. Farm laborers			

Figure 4. Overlapping inheritance effects at the sectoral, macroclass, mesoclass, and microclass levels



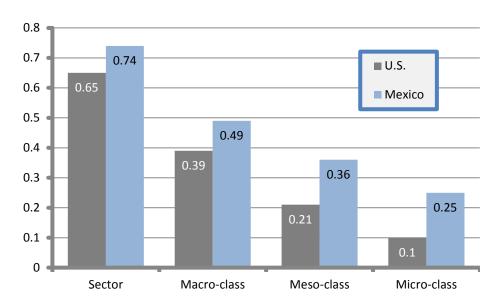


Figure 5. Observed immobility for full population

Notes: The estimates pertain to the proportion of the sample on the main diagonal of the sectoral, macro-class, meso-class, and micro-class mobility tables. Inter-country differences in proportions are significant (at p = .05, two-tailed) for all types of mobility.

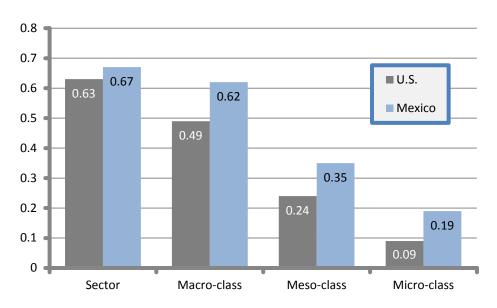


Figure 6. Observed immobility for nonfarm population

Notes: The estimates pertain to the proportion of the nonfarm sample on the main diagonal of the sectoral, macro-class, meso-class, and micro-class mobility tables. Inter-country differences in proportions are significant (at p = .05, two-tailed) for all types of mobility.

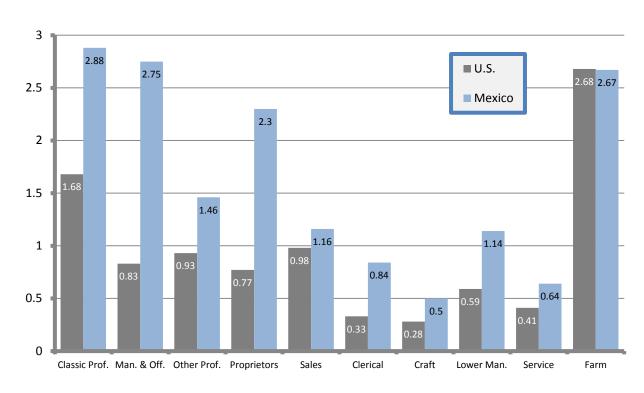


Figure 7. Coefficients of reproduction from mesoclass model

Notes: The estimates, which are in additive form, are drawn from Model 2 of Table 1. Inter-country differences in parameter estimates are significant (at p = .05) for all classes except sales, clerical, and farm.

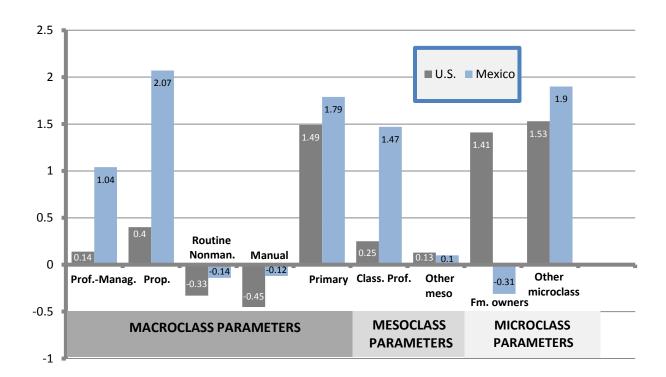


Figure 8. Coefficients of reproduction from relaxed model

Note: The estimates, which are in additive form, are drawn from Model 4 of Table 1.

Table 1. Fit statistics for models of trend

Model	L ²	Df	Δ
1. Conditional independence	35494	11808	27.91
2. Mesoclass model with country variability	28618	11788	24.46
3. Simple shift effect	21688	11708	19.57
4. Relaxed shift effect	21493	11702	19.32

Table 2. Coefficients of reproduction under simple and relaxed shift effects

	Simple <u>shift effect</u>		Relaxed shift effect	
Coefficients	U.S.	Мех.	U.S. Mex.	
Gradational	.91	.41	.97 .00	
Sectoral	.65	.29	.65 .24	
Macro class				
Profmanag.	.18	.49	.14 1.05	
Proprietors	.46	.78	.40 2.06	
Routine nonman.	34	03	3314	
Manual	44	13	4512	
Primary	1.78	2.09	1.49 1.78	
Meso class				
Classical prof.	.31	.48	.25 1.46	
Man. & off.	.18	.35	.20 .18	
Other prof.	.01	.17	.0102	
Sales	.56	.73	.60 .58	
Clerical	26	09	2629	
Craft	.02	.18	.04 .01	
Lower manual	.23	.40	.24 .21	
Service work	.11	.27	.16 .13	
Micro class (averages)				
Classical prof.	2.02	1.97	1.91 2.28	
Man. & off.	.45	.40	.44 .82	
Other prof.	1.53	1.48	1.49 1.87	
Sales	1.39	1.34	1.34 1.71	
Clerical	1.21	1.16	1.20 1.57	
Craft	1.83	1.77	1.76 2.14	
Lower manual	1.86	1.81	1.81 2.19	
Service work	1.21	1.16	1.11 1.48	
Farm laborers	3.15	3.09	3.11 3.48	
Farm owners	.95	.90	1.4131	

Notes: The simple shift effects are drawn from Model 3 of Table 1, and the relaxed shift effects are drawn from Model 4 of Table 1. In calculating the micro-class averages, all nonsignificant negative coefficients were fixed at zero.

Endnotes

¹ This argument should be distinguished from Breen's (2004) criticism of scholars who ignore parameter estimates in favor of fit statistics. As Breen notes, one can find substantial crossnational differences in parameter estimates, even when a model of cross-national invariance fits reasonably well. This is of course true. We are, however, instead suggesting that the effects of inequality may be concentrated in a small number of parameters pertaining to particular sectors of the mobility table.

² The intergenerational elasticities (IGEs) typically estimated in studies of income or earnings mobility do not directly correspond to the measures of social fluidity typically estimated in studies of class mobility (given that IGEs are not measures of association).

³ This argument rests of course on the assumption that at least some of the extra inequality within high-inequality societies takes a between-class form (see Weeden et al. 2007; Moew and Kalleberg 2010; cf. Kim and Sakamoto 2008).

⁴ It has long been argued (e.g., Tawney 1930) that access to class positions becomes increasingly unequal as the conditions under which children are raised become increasingly unequal.

⁵ The top-income hypothesis, as operationalized here, is not about mobility barriers at the very top of the income distribution. Rather, it is a hypothesis about mobility barriers at the top of the class distribution, barriers that arise because the "top class" garners ever more income with the takeoff.

⁶ We calculated the 82 micro-class scores by assigning them to detailed occupations within the U.S. samples and then aggregating these detailed occupations up to the micro-class level (see note 8 for further details).

⁷ The "nonfarm population" refers here to respondents with *either* farm origins or destinations. By this definition, 54 percent of the Mexican respondents are in the farm sector, whereas 27 percent of the U.S. respondents are in the farm sector.

⁸ The careful reader will have noticed that the gradational parameter is also weaker in Mexico than in the U.S. (see Table 2). This difference disappears, however, when we substitute our prestige scale with a socioeconomic scale; and we are accordingly disinclined to attach too much weight to it. Although prestige and socioeconomic scales do correlate very highly, they differ substantially in their treatment of farmers, a difference that can be consequential when the farming population is large (as is the case with Mexico). We are grateful to Florencia Torche for encouraging us to experiment with different scales.