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All the World's Entrepreneurs: The Role of Self-Employment in Nineteen Nations

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All the World's Entrepreneurs: The Role of Self-Employment in Nineteen Nations*

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"What's an entrepreneur? I don't know, but that's what I want to be."
- Bert Jones, All-American Quarterback

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I. Introduction

The purpose of this paper is to describe the effect of self-employment income on the distribution of market income among households in nineteen nations. Many of the nations are high- income OECD countries, but we also include several countries with lower levels of income per capita, including four formerly Communist countries. At this stage our study is exploratory and descriptive: we find several stylized patterns in the distributive effects of self-employment, some of which suggest testable hypotheses to be examined in subsequent work

We begin the paper by discussing the potential economic importance of self-employment and our rationale for studying it as an income distribution phenomenon. The succeeding section discusses the technical problems in identifying the self-employed and measuring their incomes. While self-employment is easy to define conceptually, self-employment income is difficult to measure accurately with household survey data. The main results of our exploration are found in Tables 4-22, one for each nation. The nations are sorted into six categories, and the "typical" pattern of results for each category is discussed in Section IV. Section V summarizes these results and considers their implications for the direction of future research.

II. Self-Employment as Phenomenon and Mystique

To an American, self-employment conjures up images of rugged individualism and entrepreneurship, of Thomas Edison and Bill Gates. But also of Harvey Keitel in his Brooklyn cigar store or Sissy Spacek fighting "the river" as it submerges her flood-ravaged farm. Whether the author of our image is Horatio Alger or not, the "entrepreneur" as self-employed small business owner is a fixture of American culture. Thoughout the world one finds similarly potent

cultural images, whether of sheep farms in Australia, bakeries in France, or fishing vessels in Norway.

In the United States, small businesses are often seen as sources of technological innovation, job growth, vigorous competition, new goods and services, and general economic vigor. Europeans, on the other hand, often view small businesses as a throwback to an earlier (and gentler) era when small farms and family stores dominated rural and small-town economic life. The Asian tigers are seen as having parlayed an energetic small business sector into superior nationwide economic performance. Central and Eastern European countries are often thought to have lost much of their entrepreneurial culture during forty-five years of Communism. In short, there is every reason to believe that self-employment will mean different things in different places.

The reasons often given for the extent of self-employment are also numerous and varied. Many self-employed persons are scarcely "entrepreneurs" at all, but rather scions who have received a business by inheritance [Dunn/Holtz-Eakin, 1996]. Capital market imperfections are often mentioned as a drag on the growth of small business. The claim has received little rigorous testing, but individuals from wealthy families are apparently more likely to succeed in small businesses, suggesting that a liquidity constraint may be operative (for further discussion see Holtz-Eakin/Joulfaian/Rosen, 1994a & b). The detail required to test this hypothesis is unlikely to be found in internationally comparable data sets, so we cannot examine it here.

Perhaps more testable with cross-national data is the claim that self-employment is a response to rigid regulations and high taxes on large businesses, particularly in Western Europe and

Scandinavia. In large businesses both managers and workers may be forced to limit hours worked [Bjorklund/Freeman, 1994] or enter into long-term employment contracts with major legal restrictions [Kahn, 1997]. Tax regimes are often explicitly designed to favor proprietorships. Even in the United States, which is generally thought to have a particularly "free and flexible" market system, the tax and regulatory systems provide numerous incentives to form small businesses [Blau, 1987].

The growth of the service sector and recent technological changes in, for example, telecommunications have served to reduce the impact of scale economies on firm size in some industries and to encourage the formation of small firms as a way to mix business success with family life [Blau, 1987]. The rise of franchising has created opportunities for small business development which are less complicated and risky than many of those available two or three decades ago, while the decline of a mutual sense of loyalty between large businesses and their employees has created an environment in which many employees increasingly think of themselves as "entrepreneurial." And finally one should mention "animal spirits," [see Aronson, 1991, pp.25-28] the unique personality traits of the entrepreneurial personality which, among other things, distinguish risk-takers from risk-averters.

The basic rationale for our study is to see how the pattern of income from self-employment varies across nations. Is it true that the pattern in the United States varies from that in Hungary or Taiwan in ways that are readily explicable? How do self-employed households which work only in the family business compare to those which mix self-employment income with wage and

salary earnings in countries with differing histories and legal regimes? These are the kinds of questions we want to consider.

III. Measurement Issues

Conceptual Conundrums.

Macroeconomists and microeconomists alike are confounded by self-employment measurement issues. Self-employment income often includes some return to invested capital. Thus the "wage" and "profit" distributions distribution will look rather different depending on whether self-employment income is treated as "earnings" or as "capital income." Moreover, the self-employed are not as bound by rigorous or formal accounting practices as are larger enterprises, and they may have incentives to respond less than candidly to income surveys. Hence, the response of a small self-employed household to a question about earnings from self-employment is unlikely to match up very well with the accounting concept of "earnings net of the cost of owner-provided capital."

We plunge into this morass using the Luxembourg Income Study (LIS) collection of microdatasets for nineteen countries. Almost every LIS nation separates self-employment income at the *household* level. On the other hand, many countries do not identify self-employment at the level of the *individual worker*, and even those that do use a variety of definitions based on, for example, occupation codes. There is also no agreed- upon standard for treating workers who hold two jobs, only one of which involves self-employment; for instance, some nations only ask about a worker's primary occupation and make an assignment based on the response. Consequently, in some countries, one finds households with self-employment income but no

persons considered self-employed, and sometimes even self-employed persons in households with no self-employment income. For the most part, our analysis focuses on self-employment income at the *household* level. We employ an age screen which eliminates households with heads younger than 25 or older than 54. Because countries differ in their conventions in treating those who claim negative self-employment income, we recode all negative self-employment income to zero. We then break the households with self-employment income into three groups: those with *no* wage and salary income; those with wage and salary income less than self-employment income, and those with wage and salary income greater than self-employment income. Before turning to the results of our analysis, we take a short detour to summarize some of the research about the quality of the data on self-employment income reported in household surveys.

Quality of Survey Data.

Identifying the self-employed is relatively easy compared to measuring self-employment income. Concepts and measures differ among income accountants, tax authorities, survey takers, and survey respondents, so it is no surprise that the literature contains wide variations in self-employment definitions and measures. Basically, we accept each separate survey's definition of self-employment income except for recoding any negative reported incomes to zero.

There is evidence that the overall quality of survey reports of self-employment income is, on average, poor. Table 1 [taken from Atkinson Rainwater and Smeeding, 1995, Table 3.7, p.34] indicates that while wage and salary income is accurately reported in surveys, self-employment income often is not. While the authors note that these comparisons are very rough-- essentially comparing a weighted sum of amounts from household surveys to national income accounts

estimates adjusted to the same population-- the problem is obviously real. The typical ratio of self-employment income taken from surveys to the aggregate estimate is about 75 to 85 percent. For comparative work, the variation in the ratio across countries and surveys is perhaps even more disturbing, ranging from a high of 125 percent for Australia in 1981-2 to a low of 36 percent for Germany in 1983 (data which, moreover, do not separate self-employment income from property income). Hence, the conventional wisdom is that survey reports of self-employment income are generally underestimates, an important caveat to our finding that households with self-employment income but no wage and salary income have relatively low incomes in almost every country we examine.

Other evidence supports the claim that survey reports underestimate true self-employment income. Studies from Australia [Bradbury, 1996] and the United Kingdom [Eardley/Corden, 1996; Harris, 1996] present findings similar to those reported for the United States by Johnson/Smeeding [1997], shown in Table 2. Looking at that table we find that the self-employed are consistently more likely than the general population to have consumption greater than disposable income all the way up the income scale. To be sure, many low-income self-employed are actually marginal economic households substituting informal work for a lack of formal employment [Eardley/Corden, 1996]. On the other hand, there can be little doubt that in some cases self-employment is a handy way to hide income flows from the tax authorities or to disguise consumption expenditures as business expenses.

In assessing our reported results it is certainly worth recalling the character of the measurement problems. The high proportion of the self-employed in the bottom quartile of the market income

distribution in many countries is particularly suspect. Variation in the quality of reports may be less of a problem for our study, however, since many of our results cluster into rather consistent patterns.

IV. Detailed Results

We begin this section by looking at some evidence that shows the sensitivity of the stylized facts about earnings inequality to the inclusion or exclusion of self-employment from the definition of "earnings." After that we discuss the tables showing the main results of our analysis.

Self-employment Income and the Earnings Distribution: Beware of the Decile Ratio.

Table 3 shows the sensitivity of several measures of earnings distributions for prime-age men, the group most often studied by labor economists studying wage inequality, to two definitional distinctions. The first distinguishes full-year, full-time workers from all workers with positive earnings, shown in the left and right panels, respectively. Then in the upper panels we report the results with self-employment income (SEI) included, and in the bottom panels with self-employment income (SEI) excluded. In this table, the definition of self-employment was derived from occupation/industry codes. The calculations shown in the table are: the ratio of earnings at the 10th percentile to those at the median (P10), the ratio of earnings at the 90th percentile to those at the median (P90), and the ratio of earnings at the 90th percentile to those at the 10th (P90/P10).

Looking at the details of Table 3, we first compare the effects of SEI on full-year, full-time workers. Looking at the P90/P10 ratio, the earnings distribution is more unequal when SEI is included in the US, Sweden, Canada and Australia, but stays about the same in Germany and is actually more equal in the Netherlands. While the US and Canada remain the most unequal whether SEI is included or not, the relative rankings of Sweden and the Netherlands are reversed. In general, it appears that inclusion of SEI tends to increase inequality by reducing P10 more than by increasing P90, particularly in Sweden.

The right-hand panels, for all workers reporting positive earnings, shows even greater sensitivity to SEI in most of the countries. The inclusion of SEI increases P90/P10 everywhere except Germany. The effect on the relative rankings is even more interesting. When SEI is included, Canada has the highest P90/P10 and the lowest P10, and the P10 in Sweden falls below that in the US as well.

From this exercise we draw two conclusions. First, we see that including reported SEI tends to increase earnings inequality in most countries. And second, we see that percentile ratios (and presumably other measures of inequality as well) can be very sensitive to whether SEI is included and whether part-year or part-time workers are included. In Canada, Sweden and the US, for example, the P90/P10 ratios in the upper-right panel (earnings greater than zero, SEI included) are about *double* those in the lower-left panel (full year, full time, SEI excluded), and the relative rankings are different also. Hence, it is prudent to be cautious when examining "earnings" distribution data to see whether the concept of "earnings" includes wages and salaries, or whether it includes self-employment income also.

Self-employment Income and Household Earnings Distribution: Patterns and Exceptions.

The basic analytic device for our analysis is displayed in a set of tables, one set for each LIS dataset (Tables 4-22). Table 4 is the example for the United States. Households with wage and salary income (which we call WSI) and/or self-employment income (which we call SEI) are divided into four income source groups: those with no wage and salary income (NO WSI), those with self-employment income greater than wage and salary income (SEI>WSI), those with self-employment income less than wage and salary income (SEI<WSI), and those with no self-employment income (NO SEI). Panel A in each table reports the overall percentage incidence of these four types in the first data column, followed by columns showing the comparative percentage incidence within each of five income groups from the market income distribution: the 1st to the 10th percentile, the 10th to the 25th percentile, the middle two quartiles, the 75th to the 90th percentile and the 90th to the 99th percentile. The top 1 percent and bottom 1 percent of the market income distribution were omitted from the sample because top-coding conventions and the treatment of negative self-employment income are not comparable across nations. For some purposes it is more intuitive to compare the quartile composition of each group. Thus, Panel B in each table shows the allocation of households within each source group among three income groups: the 1st to 25th percentile, the 25th to 75th percentile, and the 75th to 99th percentile.

Since there are nineteen countries, it would be tedious to discuss them all, particularly because there is no recognized standard for comparison. For purposes of discussion, then, we have organized them into six categories: the (formerly British) Colonies (US, Canada, Australia); the European Core (France, Germany, the Netherlands); Scandinavia (Denmark, Norway, Sweden);

the European Periphery (Spain, Ireland, and for this purpose Italy); the Visegrad Four (Czech and Slovak Republics, Poland, Hungary), and Other Nations (Finland, Israel, Taiwan). Except for the last category, the countries within each grouping have rather similar patterns. We proceed, then, by discussing a principal example from each grouping, noting along the way any major differences within the grouping.

The Colonies (US, Canada, Australia). The US results are shown in Table 4 , and the Canada and Australia results in the two succeeding tables . About 15 percent of households have some self-employment income in all three countries. Those who combine SEI with WSI substantially outnumber those with SEI only, though the ratio is smaller in Australia than in the US or Canada. Looking at incidence within income percentiles, we find a pattern with which is common in many high-income countries: as one reads across the NO WSI row Panel A the incidence within the NO WSI type falls until the 90th percentile, then rises again, while as one reads across the rows in which SEI and earnings are combined the incidence values rise monotonically. That is, households with SEI only are most likely to be found in the bottom decile and less likely to be found as one moves up the income distribution, except that the incidence in the top decile is often larger than that in the adjacent income group, while households which combine income sources are more likely to be found the higher up the market income distribution one goes. Panel B makes a similar point in a somewhat different way: in the US, 44 percent of the households with SEI only are in the bottom quartile and only 13 percent in the top quartile. For those combining income sources, however, one finds only about 12 percent in the bottom quartile and about 36 percent in the top quartile. The results for Canada and Australia are very similar,

though the propensity for those with SEI only to be found in the bottom quartile is considerably greater in Canada.

The European Core (France, Germany, the Netherlands). France is often thought of as the land of *paysannes* and *petits bourgeoises*, and thus as a natural laboratory for the study of small business. Our data for France are displayed in Table 7. In a way the common perception is misleading: while France has a rather large contingent of self-employed households with no wage and salary income, it actually has a larger proportion with *no* self-employment income (89 percent) than any of the Colonies or even Germany. Fewer than 5 percent of French households report combining WSI with SEI. France and the Netherlands are the only countries for which this is true, and in most countries the proportion exceeds 10 percent. We find in the second panel of the table that in France (and the Netherlands) the typical pattern of incidence of self-employment appears again, but the bottom decile has a particularly high incidence of those with only SEI. In France there is also a high incidence of NO WSI in the top decile. We will see this phenomenon again, but not in any country with an income level as high as France. Germany, shown in Table 9, does not follow the French pattern as closely as the Netherlands. Those who combine WSI with SEI are somewhat more numerous (though not by world standards), and the similarity of the distribution of income within the NO WSI category to that in the nation as a whole is notable compared to the relative poverty of this group in France. Germany is virtually unique in having a fairly high incidence of SEI>WSI in the bottom decile. In sum, the primary distinctive of the European Core pattern is the tendency for self-employed households to have no wage and salary income at all. France and the Netherlands also have a strong concentration of those with no wage and salary income in the bottom decile.

Scandinavia (Denmark, Norway, Sweden). A typical example of the Scandinavian pattern is Denmark, shown in Table 10. All of the Scandinavian countries are marked by high proportions of households with WSI>SEI>0, much more like the North American economies than the European Core. And in contrast to the Core economies, each has only about 2 percent of its households in the NO WSI category. Norway is different in having a lot of households with SEI>WSI>0. Perhaps the principal distinctive of the Scandinavian economies compared to the Core countries is that the NO WSI households are not concentrated in the bottom *decile*, though they are highly concentrated in the bottom *quartile*. The concentration in the bottom quartile is particularly dramatic in Sweden (Table 12), which is also distinctive for the relatively low incomes associated with households with SEI>WSI>0.

The European Periphery (Spain, Ireland, Italy). Although the core/periphery distinction was originally devised with economic distinctions in mind, it is commonplace to note that in Europe the periphery nations are on the geographical periphery as well. Although Italy has a higher income level than Spain or Ireland, the role of self-employment in the income distribution is much more similar to Spain than to France. Spain (Table 13) is a good example of the Periphery pattern. A clear distinctive of these nations compared to any we have seen earlier is that self-employment income is received by a lot more of the households. Typically, about 15 percent have no wage and salary income, about 75 percent have no SEI, and about 10 percent combine both sources. In Spain the incidence of NO WSI falls steadily as the income percentile rises; in Italy (Table 15), however, one finds the more typical case of a relatively high incidence in the top decile. With minor exceptions (in Italy and Ireland), the pattern of incidence for those combining

SEI with WSI follows the usual pattern of rising with income. Looking at Panel B for Spain, we see that compared with other countries we have considered so far, only Germany has a distribution within the NO WSI category that diverges so little from the overall income distribution.

The Visegrad Four (Czech Republic, Slovak Republic, Poland, Hungary). One would expect the transition economies of Central Europe to have somewhat different self-employment patterns, and they do. It is perhaps useful to know that in the one LIS dataset for a country prior to transition, Poland in 1986, the proportion with WSI>SEI>0 was 36 percent, i.e., over a third of the households supplemented wages with a smaller income from self-employment. Looking at Tables 16-19, we see that although self-employment is no longer an abnormally common source of income for the Visegrad countries, the use of self-employment to supplement wages remains a common pattern (except in the Slovak Republic). Although the Czech Republic is in some ways typical of these economies, the transitions have diverged substantially, so the pattern commonality is not as strong as in the previous cases. Households with no wage and salary income are not very prevalent anywhere except Poland. Except in Hungary, this group is less concentrated in the bottom quartile than in most countries, but retains the commonly observed differential incidence in the top decile. Those with SEI>WSI do well in all four countries, though they are rare in Poland and Hungary. The most interesting and complicated patterns involve the large group with WSI>SEI>0. In both Poland and Hungary the incidence of this source group is substantial in virtually every income group and is not at its largest in the top decile, as it has been in every previous table save one (Ireland). One should not overstate this result, since this source group is highly concentrated in the upper quartile even in Hungary (though not in Poland), but as a general

proposition, households supplementing their WSI with SEI seem to be more spread around in the income distribution in the Visegrad countries than in most others.

Other Nations (Finland, Israel, Taiwan). Recent additions to the LIS database give the researcher the ability to extend comparative research outside the usual OECD framework. The patterns of self- employment income in these three countries are distinctly different from those we have seen in the other tables. Finland (Table 20), perhaps as a consequence of its unusual history, is a hybrid of other models. The high proportion with some self-employment income is similar to the Periphery countries; the tendency for the NO WSI category to be highly concentrated in the bottom quartile is reminiscent of the Scandinavian model; and the prevalence in every income group of a large number of households supplementing their wages with SEI is just what we found in the transition economies. Israel (Table 21) shows a still different hybrid pattern. The prevalence of SEI is lower than in the Periphery economies but higher than in any other countries we have examined (except perhaps Poland). More interesting, though, is the distribution in the large NO WSI category: in contrast to the rest of the world, this group in Israel is predominately found in the *middle* of the income distribution, though the incidence in both extreme deciles is also fairly high. And last there is Taiwan, which has a pattern unlike any other we have seen. Self-employment is very prevalent and involves both households with no wage and salary income and households which combine SEI with WSI. More important, those without wage and salary incomes are predominately to be found in the *top* quartile, while those with SEI<WSI are concentrated in the bottom quartile. Because self- employment income is so important at the top of the income distribution there, Taiwan has a much lower proportion of its NO SEI population in the top quartile than any other nation we have studied.

V. Summary and Implications

We have provided and discussed descriptive results on the patterns of self-employment and the effects on the earnings distribution for nineteen separate nations in nineteen separate tables. We now provide two summary tables and some discussion of their implications for the direction of future research.

The first summary table, Table 23, shows the overall incidence of the source group categories for all nineteen countries and is thus a summary of the first data column in Panel A of Tables 4 to 22. The NO WSI category, those with self-employment income but no wage and salary income, is particularly prevalent in the European Periphery countries of Spain, Ireland and Italy, and in Taiwan. Among the major OECD countries, it is most prevalent in Australia and in France. Except for France, those same economies also have a relatively high prevalence of the SEI>WSI category, households which supplement self-employment income with wages. The correlation is not very strong, however, since the SEI>WSI category is also fairly prevalent in countries like Norway and Finland which lack a large NO WSI category. The WSI>SEI category, in which wage and salary income is supplemented by self-employment income, is perhaps the most interesting. This category dominates the ranks of the self-employed in North America, Scandinavia, and three of the four Visegrad countries. It is also important in the European periphery countries of Spain, Ireland and Italy, but not in the European core countries of France, the Netherlands, or Germany. We regard a deeper analysis of this category as a major research challenge. The prevalence of the NO SEI category, with no self-employment income, is obviously related to income level, though the transition economies spoil the correlation a bit.

The second summary table, Table 24, summarizes some of the quartile distribution information from the Panel B of the earlier tables for six "representative" economies. Though there are exceptions (Germany, Ireland, Finland, and a couple of the transition economies) it is generally correct that the higher the income level of a nation, the more concentrated in the bottom quartile are the households with no wage and salary income (NO WSI). Whether this pattern is simply an artifact of underreporting or can be explained by rural location, for example, or by a paucity of supplementary earners, is a topic for future research. The fact that the pattern is so obvious and is found in societies with very different levels of aggregate inequality suggests that it is a topic worth pursuing. The group with SEI>WSI, those who supplement self-employment income with wages, are not particularly *numerous* in many societies, but they are particularly *successful* in virtually every society. One wonders why their success has not been more widely emulated, and whether there are common features across countries which explain both the path to success and the barriers which prevent others from following it. The SEI<WSI category, which supplements wage and salary income with self-employment is, as stated in the previous paragraph, important in many countries, but not in some others; in most countries (but not Taiwan), this category is differentially represented in the top quartile. It is unclear whether the success of the groups which combine income sources is just a consequence of having an abnormally large number of earners, or whether there is some unique economic feature of households which combine income in this way.

In summary, self-employment seems to play a major role in altering the market income distribution in almost every country. The image of the self-employed as households fully devoted

to farms or family businesses is clearly inaccurate, especially in higher-income countries, and households who maintain that pattern tend to divide into a large group who do relatively poorly and a small group who do very well. In many countries, the bulk of self-employment is either supplemented by wage and salary income or supplements wage and salary income. These households that combine income sources seem to be very successful in almost every society, and the analysis of the sources of their success is a major challenge for research.

Among the next steps one could take to advance the analysis of self-employment income, two make particularly good use of LIS data. First, it is possible in most countries to separate farm from non-farm income sources to determine the extent to which patterns of self-employment income are affected by the primary sector. Second, it is possible to examine whether individual adults are combining income from WSI and SEI, or whether households which combine sources are largely composed of adults specializing in a single source. We plan to follow both of these research tracks in our future work.

As is often the case with an initial foray, we have discovered more questions than answers. Some of the patterns and puzzles materially affect the interpretation of the role of self-employment in determining the income distribution. Arriving at a fuller understanding of differences in cross-national patterns of income inequality will require additional research into the role of self-employment around the world.

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Table 1. Quality of Income Data: Ratio of Survey Estimates to Adjusted National Accounts Estimates (in percent)

	Country and Year									
	Australia		Canada		Finland	Germany	Italy	United Kingdom	United States	
Income item	1981-82	1985-86	1981	1987	1987	1983	1989	1987	1979	1987
Wages and Salaries	92.2	100.6	101.6	100.0	101.5	108.8	106.9	93.7	97.4	99.4
Self-Employment Income	124.9[a]	83.7	78.2	90.4	73.4	36.3[b]	53.1	75.7	84.2	78.5
Property Income	50.7	66.7	60.5	47.7	82.5		78.4	50.6	45.1	55.2
Occupational Pension Income			85.4					74.5	81.5	81.6
Government Transfers	75.4	66.4	77.5	75.5	90.6	50.6	74.3	90.9	82.8	86.9
Total (all income)[c]	83.0	81.7	92.4	90.1	93.5[d]	76.9	80.6	89.0	89.0	89.2

[a]In 1981-82 (but not 1985-86) wages received by persons from their own limited liability company have been grouped with self-employment income, whereas the convention followed by the national accounts is to classify this income as wages and salaries.

[b]Includes property income.

[c]Based on sum of items presented above only. Some income amounts, e.g., alimony and child support or private transfers, have no administration data to which the survey data can be compared.

[d]Sum of items above.

Country Sources:

Australia: comparisons between Unit Record File and National Accounts provided by Bruce Bradbury of Social Policy Research Centre, University of New South Wales.

Canada (1981): survey data from *Survey of Consumer Finances* for 1981; comparisons from unpublished tabulations based on family income data provided by Statistics Canada.

Canada (1987): survey data from *Survey Consumer Finances* for 1987; comparisons from SCF/National Account Reconciliation, Statistics Canada, Household Survey Division.

Finland: provided by Aino Salomaki of the Government Institute for Economic Research, Helsinki.

Germany: comparison of SOEP Transfer Survey and National Accounts, from Kassella and Hochmuth (1989), Table 14.

Italy: Brandolini (1993).

United Kingdom: data from *Family Expenditure Survey* for 1977; comparisons as reported by Atkinson and Micklewright (1983) using, in part, methodology developed by Ramprakash (1975).

United States (1979): survey data from the *Current Population Survey* for 1979, as reported in U.S. Bureau of the Census (1981), Table A-2).

United States (1987): survey data from *Current Population Survey* for 1987 as reported in U.S. Bureau of the Census (1991), Table A-1, page 74).

Source: Atkinson, Rainwater, and Smeeding (1995), Table 3.7.

Table 2. Percent of Individuals in Households with Consumption Greater than Disposable Income by Quintile and Various Family Types for 1994-95[a]

Family Type	Disposable Income Quintile				
	Bottom	Second	Third	Fourth	Top
By Age of Reference Person					
Less than age 25	66.5	50.0	30.6	10.8	0.0
25 to 34	82.5	42.5	21.0	13.7	3.6
35 to 44	81.9	49.9	27.7	10.7	3.2
45 to 54	81.2	60.7	25.6	17.9	8.8
55 to 64	86.2	62.0	40.0	24.9	7.1
65 and older	86.8	76.0	52.9	26.9	13.2
Transfer Recipients	65.7	32.9	28.2	0.0	6.6
Self-Employed	93.8	75.4	61.3	35.1	10.6
All Individuals	81.0	55.5	31.0	16.0	6.5

[a]Age categories are determined by the age of the reference person. Transfer recipients are those consumer units who received general welfare assistance (including AFDC), job training or food stamps. Self-employed category includes those consumer units in which the reference person is self-employed.

Source: Johnson and Smeeding (1997), Table 5.

Table 3. Cross-National Differences in Earnings Inequality among Men, Aged 25 to 54[a]

		Full-Year/Full-Time Workers[b]			All Workers with Earnings Greater then 0		
	Year	P10	P90	P90/P10	P10	P90	P90/P10
				Including SEI			
Australia	1985	64.1	154.9	2.42	46.2	158.8	3.44
Canada	1987	48.4	160.6	3.32	26.5	176.0	6.63
Germany	1984	69.1	165.4	2.39	52.3	166.6	3.18
The Netherlands	1987	73.7	156.9	2.13	67.7	174.5	2.58
Sweden	1987	49.6	137.8	2.78	29.9	162.0	5.42
United States	1986	44.6	179.1	4.01	31.6	194.8	6.15
				Excluding SEI			
Australia	1985	66.7	153.4	2.30	53.7	156.9	2.92
Canada	1987	52.0	159.5	3.07	30.3	173.1	5.71
Germany	1984	69.7	165.5	2.37	53.0	167.3	3.16
The Netherlands	1987	70.1	170.0	2.42	67.7	168.0	2.48
Sweden	1987	71.7	155.7	2.17	36.9	159.5	4.32
United States	1986	46.8	179.0	3.83	34.0	194.3	5.71

[a]Earnings are net of employer contributions to social insurance (payroll taxes), but gross of employee payroll taxes.

[b]Full-Year/Full-Time Workers includes only those so determined using country-specific definitions.

Source: LIS database.

Table 4. Incidence and Allocation of Income Source Groups to Household Income Percentiles: United States, 1994
(in percent)

A. Percentage Incidence of Income Source Groups within Income Percentiles

Income Source Group[a]	Income Percentile[b]					
	1 to 99	1 to 10	10 to 25	25 to 75	75 to 90	90 to 99
No WSI	2.95	6.61	4.51	2.50	1.44	1.86
SEI > WSI	2.66	0.97	1.64	2.71	2.96	5.23
SEI < WSI	7.57	2.95	3.86	7.65	11.05	11.96
No SEI	86.83	89.47	89.99	87.14	84.55	80.95
All	100.00	100.00	100.00	100.00	100.00	100.00

B. Percentage Allocation of Income Source Groups to Income Percentiles

	1 to 25	25 to 75	75 to 99	1 to 99
No WSI	43.61	43.09	13.30	100.00
SEI > WSI	12.88	51.86	35.26	100.00
SEI < WSI	11.44	51.52	37.04	100.00
No SEI	25.31	51.12	23.58	100.00

[a]Income source groups: **No WSI** = no wage and salary income; **SEI > WSI** = self-employment income exceeds nonzero wage and salary income; **SEI < WSI** = wage and salary income exceeds nonzero self-employment income; and **No SEI** = no self-employment income.

[b]Market income distribution for households with heads aged 25 to 54; top and bottom 1 percent deleted.

Source: Authors' tabulations from Luxembourg Income Study.

Table 5. Incidence and Allocation of Income Source Groups to Household Income Percentiles: Canada, 1994
(in percent)

A. Percentage Incidence of Income Source Groups within Income Percentiles

Income Source Group[a]	Income Percentile[b]					
	1 to 99	1 to 10	10 to 25	25 to 75	75 to 90	90 to 99
No WSI	3.25	8.22	7.30	2.10	1.20	1.58
SEI > WSI	3.62	2.37	4.67	3.32	3.08	5.72
SEI < WSI	9.17	3.34	6.49	9.79	11.22	12.39
No SEI	83.95	86.08	81.53	84.80	84.50	80.32
All	100.00	100.00	100.00	100.00	100.00	100.00

B. Percentage Allocation of Income Source Groups to Income Percentiles

	1 to 25	25 to 75	75 to 99	1 to 99
No WSI	56.91	32.97	10.12	100.00
SEI > WSI	25.55	46.85	27.60	100.00
SEI < WSI	14.09	54.67	31.24	100.00
No SEI	24.02	51.70	24.27	100.00

[a]Income source groups: **No WSI** = no wage and salary income; **SEI > WSI** = self-employment income exceeds nonzero wage and salary income; **SEI < WSI** = wage and salary income exceeds nonzero self-employment income; and **No SEI** = no self-employment income.

[b]Market income distribution for households with heads aged 25 to 54; top and bottom 1 percent deleted.

Source: Authors' tabulations from Luxembourg Income Study.

Table 6. Incidence and Allocation of Income Source Groups to Household Income Percentiles: Australia, 1989
(in percent)

A. Percentage Incidence of Income Source Groups within Income Percentiles

Income Source Group[a]	Income Percentile[b]					
	1 to 99	1 to 10	10 to 25	25 to 75	75 to 90	90 to 99
No WSI	5.73	12.17	10.21	4.72	2.67	3.90
SEI > WSI	4.70	1.85	3.24	4.53	4.56	10.61
SEI < WSI	5.52	1.71	3.61	5.36	7.13	9.92
No SEI	84.05	84.27	82.93	85.39	85.64	75.57
All	100.00	100.00	100.00	100.00	100.00	100.00

B. Percentage Allocation of Income Source Groups to Income Percentiles

	1 to 25	25 to 75	75 to 99	1 to 99
No WSI	43.42	42.93	13.65	100.00
SEI > WSI	13.63	50.13	36.24	100.00
SEI < WSI	12.46	50.54	37.00	100.00
No SEI	22.76	52.91	24.33	100.00

[a]Income source groups: **No WSI** = no wage and salary income; **SEI > WSI** = self-employment income exceeds nonzero wage and salary income; **SEI < WSI** = wage and salary income exceeds nonzero self-employment income; and **No SEI** = no self-employment income.

[b]Market income distribution for households with heads aged 25 to 54; top and bottom 1 percent deleted.

Source: Authors' tabulations from Luxembourg Income Study.

Table 7. Incidence and Allocation of Income Source Groups to Household Income Percentiles: France, 1989
(in percent)

A. Percentage Incidence of Income Source Groups within Income Percentiles

Income Source Group[a]	Income Percentile[b]					
	1 to 99	1 to 10	10 to 25	25 to 75	75 to 90	90 to 99
No WSI	5.76	17.70	4.25	4.41	2.66	8.72
SEI > WSI	2.24	0.40	0.42	2.05	3.38	6.29
SEI < WSI	2.63	0.61	1.66	2.89	3.28	3.77
No SEI	89.37	81.29	93.68	90.65	90.68	81.22
All	100.00	100.00	100.00	100.00	100.00	100.00

B. Percentage Allocation of Income Source Groups to Income Percentiles

	1 to 25	25 to 75	75 to 99	1 to 99
No WSI	39.99	39.06	20.95	100.00
SEI > WSI	4.52	46.67	48.81	100.00
SEI < WSI	11.76	56.07	32.17	100.00
No SEI	24.46	51.71	23.83	100.00

[a]Income source groups: **No WSI** = no wage and salary income; **SEI > WSI** = self-employment income exceeds nonzero wage and salary income; **SEI < WSI** = wage and salary income exceeds nonzero self-employment income; and **No SEI** = no self-employment income.

[b]Market income distribution for households with heads aged 25 to 54; top and bottom 1 percent deleted.

Source: Authors' tabulations from Luxembourg Income Study.

Table 8. Incidence and Allocation of Income Source Groups to Household Income Percentiles: The Netherlands, 1991
(in percent)

A. Percentage Incidence of Income Source Groups within Income Percentiles

Income Source Group[a]	Income Percentile[b]					
	1 to 99	1 to 10	10 to 25	25 to 75	75 to 90	90 to 99
No WSI	2.63	8.97	2.36	1.95	2.20	2.54
SEI > WSI	1.67	1.73	1.50	0.75	2.04	6.43
SEI < WSI	2.77	2.26	2.18	2.36	3.34	5.49
No SEI	92.93	87.04	93.96	94.94	92.41	85.53
All	100.00	100.00	100.00	100.00	100.00	100.00

B. Percentage Allocation of Income Source Groups to Income Percentiles

	1 to 25	25 to 75	75 to 99	1 to 99
No WSI	39.13	38.76	22.11	100.00
SEI > WSI	21.56	23.31	55.13	100.00
SEI < WSI	18.20	44.45	37.34	100.00
No SEI	22.58	53.29	24.14	100.00

[a]Income source groups: **No WSI** = no wage and salary income; **SEI > WSI** = self-employment income exceeds nonzero wage and salary income; **SEI < WSI** = wage and salary income exceeds nonzero self-employment income; and **No SEI** = no self-employment income.

[b]Market income distribution for households with heads aged 25 to 54; top and bottom 1 percent deleted.

Source: Authors' tabulations from Luxembourg Income Study.

Table 9. Incidence and Allocation of Income Source Groups to Household Income Percentiles: Germany, 1989
(in percent)

A. Percentage Incidence of Income Source Groups within Income Percentiles						
Income Source Group[a]	Income Percentile[b]					
	1 to 99	1 to 10	10 to 25	25 to 75	75 to 90	90 to 99
No WSI	4.69	6.37	4.13	5.12	4.55	1.77
SEI > WSI	3.75	4.06	2.24	2.55	3.93	12.51
SEI < WSI	3.92	0.00	0.60	4.20	5.27	9.68
No SEI	87.64	89.57	93.03	88.14	86.25	76.04
All	100.00	100.00	100.00	100.00	100.00	100.00

B. Percentage Allocation of Income Source Groups to Income Percentiles				
	1 to 25	25 to 75	75 to 99	1 to 99
No WSI	26.16	55.46	18.38	100.00
SEI > WSI	19.16	34.45	46.39	100.00
SEI < WSI	2.38	54.57	43.15	100.00
No SEI	25.88	51.09	23.03	100.00

[a]Income source groups: **No WSI** = no wage and salary income; **SEI > WSI** = self-employment income exceeds nonzero wage and salary income; **SEI < WSI** = wage and salary income exceeds nonzero self-employment income; and **No SEI** = no self-employment income.

[b]Market income distribution for households with heads aged 25 to 54; top and bottom 1 percent deleted.

Source: Authors' tabulations from Luxembourg Income Study.

Table 10. Incidence and Allocation of Income Source Groups to Household Income Percentiles: Denmark, 1992
(in percent)

A. Percentage Incidence of Income Source Groups within Income Percentiles						
Income Source Group[a]	Income Percentile[b]					
	1 to 99	1 to 10	10 to 25	25 to 75	75 to 90	90 to 99
No WSI	2.14	2.53	4.89	1.83	0.90	1.34
SEI > WSI	3.83	0.00	2.44	3.33	4.40	9.18
SEI < WSI	6.59	0.51	3.56	6.26	9.09	11.19
No SEI	87.44	96.97	89.10	88.58	85.61	78.30
All	100.00	100.00	100.00	100.00	100.00	100.00

B. Percentage Allocation of Income Source Groups to Income Percentiles				
	1 to 25	25 to 75	75 to 99	1 to 99
No WSI	40.46	46.56	12.98	100.00
SEI > WSI	10.26	47.44	42.31	100.00
SEI < WSI	8.93	51.86	39.21	100.00
No SEI	19.95	55.25	24.79	100.00

[a]Income source groups: No **WSI** = no wage and salary income; **SEI > WSI** = self-employment income exceeds nonzero wage and salary income; **SEI < WSI** = wage and salary income exceeds nonzero self-employment income; and No **SEI** = no self-employment income.

[b]Market income distribution for households with heads aged 25 to 54; top and bottom 1 percent deleted.

Source: Authors' tabulations from Luxembourg Income Study.

Table 11. Incidence and Allocation of Income Source Groups to Household Income Percentiles: Norway, 1991
(in percent)

A. Percentage Incidence of Income Source Groups within Income Percentiles

Income Source Group[a]	Income Percentile[b]					
	1 to 99	1 to 10	10 to 25	25 to 75	75 to 90	90 to 99
No WSI	1.83	2.98	3.49	1.65	0.71	0.88
SEI > WSI	6.35	4.37	4.20	5.88	7.16	12.91
SEI < WSI	8.83	1.95	3.27	8.38	12.68	20.19
No SEI	82.99	90.70	89.04	84.09	79.45	66.02
All	100.00	100.00	100.00	100.00	100.00	100.00

B. Percentage Allocation of Income Source Groups to Income Percentiles

	1 to 25	25 to 75	75 to 99	1 to 99
No WSI	42.73	46.73	10.54	100.00
SEI > WSI	15.76	47.90	36.33	100.00
SEI < WSI	7.50	49.05	43.45	100.00
No SEI	25.39	52.39	22.23	100.00

[a]Income source groups: **No WSI** = no wage and salary income; **SEI > WSI** = self-employment income exceeds nonzero wage and salary income; **SEI < WSI** = wage and salary income exceeds nonzero self-employment income; and **No SEI** = no self-employment income.

[b]Market income distribution for households with heads aged 25 to 54; top and bottom 1 percent deleted.

Source: Authors' tabulations from Luxembourg Income Study.

Table 12. Incidence and Allocation of Income Source Groups to Household Income Percentiles: Sweden, 1992
(in percent)

A. Percentage Incidence of Income Source Groups within Income Percentiles						
Income Source Group[a]	Income Percentile[b]					
	1 to 99	1 to 10	10 to 25	25 to 75	75 to 90	90 to 99
No WSI	1.90	7.29	6.04	0.79	0.12	0.40
SEI > WSI	1.81	1.41	2.93	1.74	1.56	1.10
SEI < WSI	6.64	3.80	3.80	6.09	9.42	11.75
No SEI	89.65	87.50	87.23	91.38	88.90	86.75
All	100.00	100.00	100.00	100.00	100.00	100.00

B. Percentage Allocation of Income Source Groups to Income Percentiles				
	1 to 25	25 to 75	75 to 99	1 to 99
No WSI	75.15	21.86	2.99	100.00
SEI > WSI	30.47	50.32	19.21	100.00
SEI < WSI	12.75	48.20	39.05	100.00
No SEI	21.71	53.54	24.75	100.00

[a]Income source groups: **No WSI** = no wage and salary income; **SEI > WSI** = self-employment income exceeds nonzero wage and salary income; **SEI < WSI** = wage and salary income exceeds nonzero self-employment income; and **No SEI** = no self-employment income.

[b]Market income distribution for households with heads aged 25 to 54; top and bottom 1 percent deleted.

Source: Authors' tabulations from Luxembourg Income Study.

Table 13. Incidence and Allocation of Income Source Groups to Household Income Percentiles: Spain, 1990
(in percent)

A. Percentage Incidence of Income Source Groups within Income Percentiles

Income Source Group[a]	Income Percentile[b]					
	1 to 99	1 to 10	10 to 25	25 to 75	75 to 90	90 to 99
No WSI	13.80	20.62	18.34	14.05	8.96	6.32
SEI > WSI	5.55	3.35	3.06	3.82	10.96	12.40
SEI < WSI	5.84	1.28	2.28	5.51	10.04	11.07
No SEI	74.80	74.74	76.31	76.61	70.04	70.20
All	100.00	100.00	100.00	100.00	100.00	100.00

B. Percentage Allocation of Income Source Groups to Income Percentiles

	1 to 25	25 to 75	75 to 99	1 to 99
No WSI	33.70	52.15	14.15	100.00
SEI > WSI	13.86	35.32	50.82	100.00
SEI < WSI	7.95	48.32	43.74	100.00
No SEI	24.56	52.47	22.97	100.00

[a]Income source groups: **No WSI** = no wage and salary income; **SEI > WSI** = self-employment income exceeds nonzero wage and salary income; **SEI < WSI** = wage and salary income exceeds nonzero self-employment income; and **No SEI** = no self-employment income.

[b]Market income distribution for households with heads aged 25 to 54; top and bottom 1 percent deleted.

Source: Authors' tabulations from Luxembourg Income Study.

Table 14. Incidence and Allocation of Income Source Groups to Household Income Percentiles: Ireland, 1987
(in percent)

A. Percentage Incidence of Income Source Groups within Income Percentiles

Income Source Group[a]	Income Percentile[b]					
	1 to 99	1 to 10	10 to 25	25 to 75	75 to 90	90 to 99
No WSI	13.94	40.13	23.91	10.22	11.15	4.70
SEI > WSI	4.97	3.85	3.75	3.29	6.71	14.12
SEI < WSI	5.92	0.88	3.22	5.92	9.65	7.68
No SEI	75.17	55.14	69.12	80.57	72.49	73.50
All	100.00	100.00	100.00	100.00	100.00	100.00

B. Percentage Allocation of Income Source Groups to Income Percentiles

	1 to 25	25 to 75	75 to 99	1 to 99
No WSI	45.86	38.31	15.84	100.00
SEI > WSI	17.12	34.63	48.24	100.00
SEI < WSI	9.76	52.24	38.00	100.00
No SEI	19.51	56.00	24.49	100.00

[a]Income source groups: **No WSI** = no wage and salary income; **SEI > WSI** = self-employment income exceeds nonzero wage and salary income; **SEI < WSI** = wage and salary income exceeds nonzero self-employment income; and **No SEI** = no self-employment income.

[b]Market income distribution for households with heads aged 25 to 54; top and bottom 1 percent deleted.

Source: Authors' tabulations from Luxembourg Income Study.

Table 15. Incidence and Allocation of Income Source Groups to Household Income Percentiles: Italy, 1986
(in percent)

A. Percentage Incidence of Income Source Groups within Income Percentiles

Income Source Group[a]	Income Percentile[b]					
	1 to 99	1 to 10	10 to 25	25 to 75	75 to 90	90 to 99
No WSI	16.78	24.79	14.99	16.41	12.81	19.68
SEI > WSI	5.44	2.12	2.20	4.35	10.73	11.77
SEI < WSI	7.22	4.40	2.36	7.47	9.18	13.96
No SEI	70.56	68.69	80.45	71.77	67.28	54.59
All	100.00	100.00	100.00	100.00	100.00	100.00

B. Percentage Allocation of Income Source Groups to Income Percentiles

	1 to 25	25 to 75	75 to 99	1 to 99
No WSI	28.83	48.72	22.45	100.00
SEI > WSI	10.26	39.77	49.97	100.00
SEI < WSI	11.24	51.57	37.20	100.00
No SEI	27.66	50.66	21.68	100.00

[a]Income source groups: **No WSI** = no wage and salary income; **SEI > WSI** = self-employment income exceeds nonzero wage and salary income; **SEI < WSI** = wage and salary income exceeds nonzero self-employment income; and **No SEI** = no self-employment income.

[b]Market income distribution for households with heads aged 25 to 54; top and bottom 1 percent deleted.

Source: Authors' tabulations from Luxembourg Income Study.

Table 17. Incidence and Allocation of Income Source Groups to Household Income Percentiles: Slovak Republic, 1992
(in percent)

A. Percentage Incidence of Income Source Groups within Income Percentiles						
Income Source Group[a]	Income Percentile[b]					
	1 to 99	1 to 10	10 to 25	25 to 75	75 to 90	90 to 99
No WSI	2.50	4.52	2.34	2.17	2.01	3.36
SEI > WSI	3.16	0.48	0.59	2.49	5.39	10.32
SEI < WSI	2.81	1.31	1.02	2.82	3.31	6.47
No SEI	91.53	93.69	96.05	92.52	89.29	79.85
All	100.00	100.00	100.00	100.00	100.00	100.00

B. Percentage Allocation of Income Source Groups to Income Percentiles				
	1 to 25	25 to 75	75 to 99	1 to 99
No WSI	31.11	44.44	24.44	100.00
SEI > WSI	4.21	40.35	55.44	100.00
SEI < WSI	9.88	51.38	38.74	100.00
No SEI	25.45	51.71	22.84	100.00

[a]Income source groups: **No WSI** = no wage and salary income; **SEI > WSI** = self-employment income exceeds nonzero wage and salary income; **SEI < WSI** = wage and salary income exceeds nonzero self-employment income; and **No SEI** = no self-employment income.

[b]Market income distribution for households with heads aged 25 to 54; top and bottom 1 percent deleted.

Source: Authors' tabulations from Luxembourg Income Study.

Table 18. Incidence and Allocation of Income Source Groups to Household Income Percentiles: Poland, 1992
(in percent)

A. Percentage Incidence of Income Source Groups within Income Percentiles

Income Source Group[a]	Income Percentile[b]					
	1 to 99	1 to 10	10 to 25	25 to 75	75 to 90	90 to 99
No WSI	8.87	29.55	7.96	6.15	5.85	10.40
SEI > WSI	0.93	0.30	0.00	0.91	1.63	2.08
SEI < WSI	7.23	5.31	5.47	8.59	7.89	3.33
No SEI	82.97	64.85	96.58	84.35	84.63	84.18
All	100.00	100.00	100.00	100.00	100.00	100.00

B. Percentage Allocation of Income Source Groups to Income Percentiles

	1 to 25	25 to 75	75 to 99	1 to 99
No WSI	43.60	35.49	20.91	100.00
SEI > WSI	2.86	49.89	47.25	100.00
SEI < WSI	18.18	60.86	20.96	100.00
No SEI	23.00	52.04	24.97	100.00

[a]Income source groups: **No WSI** = no wage and salary income; **SEI > WSI** = self-employment income exceeds nonzero wage and salary income; **SEI < WSI** = wage and salary income exceeds nonzero self-employment income; and **No SEI** = no self-employment income.

[b]Market income distribution for households with heads aged 25 to 54; top and bottom 1 percent deleted.

Source: Authors' tabulations from Luxembourg Income Study.

Table 19. Incidence and Allocation of Income Source Groups to Household Income Percentiles: Hungary, 1994
(in percent)

A. Percentage Incidence of Income Source Groups within Income Percentiles

Income Source Group[a]	Income Percentile[b]					
	1 to 99	1 to 10	10 to 25	25 to 75	75 to 90	90 to 99
No WSI	2.02	16.18	0.50	0.65	0.00	1.99
SEI > WSI	0.72	0.00	1.31	0.21	1.07	2.65
SEI < WSI	11.32	2.82	10.26	9.80	19.11	16.90
No SEI	85.94	81.00	87.93	89.34	79.82	78.46
All	100.00	100.00	100.00	100.00	100.00	100.00

B. Percentage Allocation of Income Source Groups to Income Percentiles

	1 to 25	25 to 75	75 to 99	1 to 99
No WSI	74.56	16.51	8.93	100.00
SEI > WSI	28.07	15.37	56.56	100.00
SEI < WSI	16.06	44.54	39.41	100.00
No SEI	23.99	53.50	22.51	100.00

[a]Income source groups: **No WSI** = no wage and salary income; **SEI > WSI** = self-employment income exceeds nonzero wage and salary income; **SEI < WSI** = wage and salary income exceeds nonzero self-employment income; and **No SEI** = no self-employment income.

[b]Market income distribution for households with heads aged 25 to 54; top and bottom 1 percent deleted.

Source: Authors' tabulations from Luxembourg Income Study.

Table 20. Incidence and Allocation of Income Source Groups to Household Income Percentiles: Finland, 1991
(in percent)

A. Percentage Incidence of Income Source Groups within Income Percentiles

Income Source Group[a]	Income Percentile[b]					
	1 to 99	1 to 10	10 to 25	25 to 75	75 to 90	90 to 99
No WSI	2.37	9.45	3.65	1.55	0.52	1.13
SEI > WSI	6.50	6.19	5.70	5.68	7.39	11.16
SEI < WSI	15.07	13.10	12.99	15.89	13.74	18.10
No SEI	76.06	71.25	77.66	76.89	78.34	69.62
All	100.00	100.00	100.00	100.00	100.00	100.00

B. Percentage Allocation of Income Source Groups to Income Percentiles

	1 to 25	25 to 75	75 to 99	1 to 99
No WSI	58.69	33.51	7.80	100.00
SEI > WSI	21.83	44.84	33.33	100.00
SEI < WSI	20.85	54.07	25.09	100.00
No SEI	23.88	51.84	24.27	100.00

[a]Income source groups: **No WSI** = no wage and salary income; **SEI > WSI** = self-employment income exceeds nonzero wage and salary income; **SEI < WSI** = wage and salary income exceeds nonzero self-employment income; and **No SEI** = no self-employment income.

[b]Market income distribution for households with heads aged 25 to 54; top and bottom 1 percent deleted.

Source: Authors' tabulations from Luxembourg Income Study.

Table 21. Incidence and Allocation of Income Source Groups to Household Income Percentiles: Israel, 1992
(in percent)

A. Percentage Incidence of Income Source Groups within Income Percentiles

Income Source Group[a]	Income Percentile[b]					
	1 to 99	1 to 10	10 to 25	25 to 75	75 to 90	90 to 99
No WSI	7.85	6.62	4.91	8.79	7.41	8.31
SEI > WSI	6.83	0.84	1.61	5.62	12.72	17.24
SEI < WSI	4.90	1.69	2.99	4.70	6.10	9.81
No SEI	80.42	90.85	90.50	80.89	73.77	64.64
All	100.00	100.00	100.00	100.00	100.00	100.00

B. Percentage Allocation of Income Source Groups to Income Percentiles

	1 to 25	25 to 75	75 to 99	1 to 99
No WSI	15.53	60.27	24.20	100.00
SEI > WSI	4.06	44.23	51.71	100.00
SEI < WSI	10.77	51.71	37.52	100.00
No SEI	24.40	54.14	21.46	100.00

[a]Income source groups: **No WSI** = no wage and salary income; **SEI > WSI** = self-employment income exceeds nonzero wage and salary income; **SEI < WSI** = wage and salary income exceeds nonzero self-employment income; and **No SEI** = no self-employment income.

[b]Market income distribution for households with heads aged 25 to 54; top and bottom 1 percent deleted.

Source: Authors' tabulations from Luxembourg Income Study.

Table 22. Incidence and Allocation of Income Source Groups to Household Income Percentiles: Republic of China (Taiwan), 1991
(in percent)

A. Percentage Incidence of Income Source Groups within Income Percentiles

Income Source Group[a]	Income Percentile[b]					
	1 to 99	1 to 10	10 to 25	25 to 75	75 to 90	90 to 99
No WSI	18.59	9.06	4.90	16.53	33.42	37.62
SEI > WSI	9.52	5.29	3.24	6.77	18.00	25.34
SEI < WSI	12.00	18.65	17.38	11.59	6.84	7.30
No SEI	59.88	67.00	74.48	65.11	41.74	29.73
All	100.00	100.00	100.00	100.00	100.00	100.00

B. Percentage Allocation of Income Source Groups to Income Percentiles

	1 to 25	25 to 75	75 to 99	1 to 99
No WSI	8.47	45.39	46.15	100.00
SEI > WSI	10.26	36.30	53.44	100.00
SEI < WSI	36.34	49.33	14.33	100.00
No SEI	29.23	55.52	15.25	100.00

[a]Income source groups: **No WSI** = no wage and salary income; **SEI > WSI** = self-employment income exceeds nonzero wage and salary income; **SEI < WSI** = wage and salary income exceeds nonzero self-employment income; and **No SEI** = no self-employment income.

[b]Market income distribution for households with heads aged 25 to 54; top and bottom 1 percent deleted.

Source: Authors' tabulations from Luxembourg Income Study.

Table 23. Percentage of Households with Earnings in Each Income Source Category

Country	Income Source Group[a]			
	No WSI	SEI > WSI	SEI < WSI	No SEI
United States	2.95	2.66	7.57	86.83
Canada	3.25	3.62	9.17	83.95
Australia	5.73	4.70	5.52	84.05
France	5.76	2.24	2.63	89.37
The Netherlands	2.63	1.67	2.77	92.93
Germany	4.69	3.75	3.92	87.64
Denmark	2.14	3.83	6.59	87.44
Norway	1.83	6.35	8.83	82.99
Sweden	1.90	1.81	6.64	89.65
Spain	13.80	5.55	5.84	74.80
Ireland	13.94	4.97	5.92	75.17
Italy	16.78	5.44	7.22	70.56
Czech Republic	3.35	5.09	7.40	84.17
Slovak Republic	2.50	3.16	2.81	91.53
Poland	8.87	0.93	7.23	82.97
Hungary	2.02	0.72	11.32	85.94
Finland	2.37	6.50	15.07	76.06
Israel	7.85	6.83	4.90	80.42
Taiwan	18.59	9.52	12.00	59.88

[a]Income source groups: **No WSI** = no wage and salary income; **SEI > WSI** = self-employment income exceeds nonzero wage and salary income; **SEI < WSI** = wage and salary income exceeds nonzero self-employment income; and **No SEI** = no self-employment income.

Source: Tables 4 to 22 above.

Table 24. Proportion of Each Income Source Category in Bottom Quartile and Top Quartile Six Countries

Country	Income Source Group[a]			
	No WSI	SEI > WSI	SEI < WSI	No SEI
	Bottom Quartile Six Countries			
United States	43.61	12.88	11.44	25.31
France	39.99	4.52	11.76	24.46
Denmark	40.46	10.26	8.93	19.95
Spain	33.70	13.86	7.95	24.56
Czech Republic	30.97	5.55	12.93	26.40
Taiwan	8.47	10.26	36.34	29.23
	Top Quartile Six Countries			
United States	13.30	35.26	37.04	23.58
France	20.95	48.81	32.17	23.83
Denmark	12.98	42.31	39.21	24.79
Spain	14.15	50.82	43.74	22.97
Czech Republic	20.64	54.01	34.63	21.95
Taiwan	46.15	53.44	14.33	15.25

[a]Income source groups: **No WSI** = no wage and salary income; **SEI > WSI** = self-employment income exceeds nonzero wage and salary income; **SEI < WSI** = wage and salary income exceeds nonzero self-employment income; and **No SEI** = no self-employment income.

Source: LIS database.