



THE AMERICAN DOMINATION AMONG EMINENT ECONOMISTS

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American economists take a dominant position among eminent economists. According to *Blaug's Who's Who in Economics*, among living economists the share amounts to more than two thirds, and over one half of all eminent economists since 1700. Part of this dominance may be attributed to factors such as the definition of 'eminence', the underlying sample of scholars, and the language and style representing barriers to entry for non-American economists. However, the major reason consists in the favourable conditions for good research which in turn are based on the beneficial economic, political and social framework existing in North America.

Introduction

Fifteen of the twenty-four, or 62.5%, of Nobel Memorial Prizes in Economics have been given to economists living in the United States. This is five times the number given to economists in the United Kingdom (3), more than seven times the number of those going to Sweden (2), and fifteen times more than the one bestowed on economists in Norway, the Netherlands, the Soviet Union, and Germany.¹ Is this clear dominance just a feature of Nobel Prizes, or does it correspond to a more general overrepresentation of Americans among the leading contemporary economists?

Last year, *Blaug* (1986a) published the second edition of *Who's Who in Economics*, containing over 1300 living and past economists over the period 1700-1986. This makes it possible to study the distribution of what are considered eminent economists over countries. The first part of this paper presents the facts according to various criteria, the second part suggests possible interpretations.

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The facts

Eminent living economists

The criterion for including an economist in *Who's Who in Economics* is well defined: those scientists most often cited in professional economics journals. Thus, the evaluation of who is an 'eminent' or 'major' economist is based on the peer group's view. According to *Blaug* (1986a, p. vii) this criterion is well suited to determine who is an eminent economist:

"We may virtually reduce the concept of eminence to frequency of citations, because the number of times particular economists are footnoted in journal articles over a period of years has been shown to be highly correlated with the award of Nobel prizes, with election to offices in leading professional associations, and with differences in salaries earned".²

The source for the number of citations is the *Social Science Citation Index* published by the Institute of Scientific Information in Philadelphia. It covers more than 5000 social science journals from 45 countries of which *Blaug* selected a core of 202 professional economics journals, among which 88 are in languages other than (exclusively) English. *Blaug's* selection is consonant with the 200 journals included in the 22 Volumes of the *Index of Economic Articles 1886-1980*, edited by the American Economic Association (1985). The citation count extends over the period 1972-83.

At about number 1000 in the rank order of citation frequencies of economists there is a marked discontinuity beyond which the citations drop to two or three per year. Therefore, the number 1000 has been used as a cut-off point between major and minor economists. 123 of them did not respond to the mailing in which they were asked to provide information on themselves. According to *Blaug* (1986a, p. ix), there are currently something like 17,000 economists who are more or less regular contributors to professional economics journals; *Who's Who* thus includes about 5% of the publishing economists.

Table 1 shows the distribution of the most frequently cited *living* economists according to country of residence.

The dominance of American economists is striking: not less than 68% of all eminent economists live in the United States. This corresponds rather closely to the 62% share among Nobel Prize winners. In this 'Hall of Fame' (using the term of *Hansen and Weisbrod 1972*), Americans are almost five times as much represented as their colleagues from the United Kingdom, seventeen times as much as the Canadians, twenty-three times as much as the French, and thirty times as much as the Germans. This relative predominance is quite similar to the one for Nobel Prizes.³

Table 1
The distribution of eminent *living* economists
according to country of residence. Absolute numbers, percentage
and cumulative shares

Rank	Country	Absolute numbers (N=877)	Percentage share	Cumulative percentage share
1	United States	594	67.7	67.7
	United Kingdom	122	13.9	81.6
	Canada	34	3.9	85.5
	France	26	3.0	88.5
5	Germany (Fed. Rep.)	20	2.3	90.8
	Israel	16	1.8	92.6
	Australia	10	1.1	93.7
	Italy	10	1.1	94.9
	Japan	10	1.1	96.0
10	Netherlands	9	1.0	97.0
	Belgium	5	0.6	97.6
	Switzerland	4	0.5	98.1
	Norway	4	0.5	98.6
	Sweden	3	0.3	98.9
15	Soviet Union	2	0.2	99.1
	Ireland	1	0.1	99.2
	India	1	0.1	99.3
	Hungary	1	0.1	99.4
	Chile	1	0.1	99.5
20	China	1	0.1	99.7
	Spain	1	0.1	99.8
	South Africa	1	0.1	99.9
	Austria	1	0.1	100.0

Source: Computed from *Blaug* (1986a).

The family of nations comprises today something like 160 countries.⁴ In 137, or 86%, of them there is no eminent economist living. It would thus be difficult to argue that economics and economists are truly international, at least in so far as publishing recognized research goes.

The three Anglo-Saxon countries, the United States, the United Kingdom and Canada⁵ comprise 86% of all eminent economists, and take the three top positions. The French speaking countries (which include parts of Belgium, Canada and Switzerland) have a share of at most 4% of all major economists. The German speaking world (Germany, Austria and parts of Switzerland) has a share of less than 3%, and the Scandinavian countries' (including Denmark) share does not even reach 1%.

The communist countries are almost non-existent: they have only four eminent economists according to *Blaug's* criterion, or one half of one percent. The same is true for the countries of the Third World: India, Chile, and China are the only countries which are represented at all, each with just one leading economist.

Comparing the New World (North America) with the Old World (Europe) shows how much the centre of intellectual economic activity (at least according to the definition used here) has shifted since the foundations of our science were laid: 72% of living eminent economists are in the New World, only 24% in the Old World. The rest is made up of essentially three countries: Israel with sixteen and Japan and Australia with ten eminent economists each.

Eminent past economists

The *Who's Who in Economics* includes 437 dead economists. They were selected by the author by a critical comparison of the dead economists listed in the indices of leading histories of economic thought. Mark *Blaug* being himself a noted specialist in this field [see in particular his *Economic Theory in Retrospect* (1985), or more recently *Blaug* (1986b, 1986c)], it may be assumed that the choice has been made in a competent way.

Table 2 presents the distribution of eminent past economists according to country of residence.

The United States is ranked second (23% of the total) after the United Kingdom with 36% of all leading past economists. Thereafter follow Germany, France, Italy, and Austria. Worth noting is the significant contribution by the Soviet Union (Russia), Ireland and Sweden.

The share of the three Anglo-Saxon countries the United States, the United Kingdom and Canada of eminent past economists is high with 59% of the total, but significantly lower than among the living economists (where it was 86%). With the exception of the United States, the Old World has contributed almost all leading past economists (99% of the rest).

How recent is the stock of eminent economists?

The stock of leading economists included in *Who's Who* is composed of living and dead scientists. As has been pointed out, the living economists are those most often quoted over the period 1972–83, and the dead economists comprise the period 1700–1986. The share of currently producing economists in the total of dead and living economists gives an indication of how recent or far back a country's contribution to the stock of economic knowledge is.

Table 2
The distribution of eminent *past* economists according
to country of residence

Rank	Country	Absolute numbers (N=437)	Percentage share	Cumulative percentage share
1	United Kingdom	155	35.5	35.5
	United States	100	22.9	58.4
5	Germany	53	12.1	70.5
	France	48	11.0	81.5
	Italy	20	4.6	86.0
10	Austro-Hungary ^a	12	2.7	88.8
	Soviet Union	10	2.3	91.0
	Ireland	8	1.8	92.9
	Sweden	8	1.8	94.7
15	Switzerland	5	1.1	95.9
	Spain	3	0.7	96.5
	Belgium	3	0.7	97.2
	South Africa	2	0.5	97.7
	Poland	2	0.5	98.1
20	Norway	2	0.5	98.6
	Netherlands	2	0.5	99.1
	Denmark	1	0.2	99.3
	Canada	1	0.2	99.5
	India	1	0.2	99.8
	Australia	1	0.2	100.0

^aFor data reasons, Austria and Hungary are treated as unit, because several eminent economists were born in the then Austro-Hungarian monarchy.

Table 3 presents the total number of eminent economists, and the share of them actually living, according to country.

The United States is strongly dominant, more than half (53%) of the economists who have contributed to the recognized stock of knowledge have their (last) residence in that country. The United Kingdom is clearly second, but contributes less than half as many eminent economists. There is a striking difference with respect to recency of the contributions: in the United States 86% of eminent economists are still living and producing, while in Britain it is only 44%.

There are two countries, Israel and Japan, where *all* eminent economists are still living.⁶ Canada (97%) and Australia (91%) also surpass the U.S. economists' 'recency index'. On the other extreme there is Austro-Hungary where twelve out of fourteen, and Ireland where eight out of nine eminent economists have died. The situation in the Soviet Union with ten out of twelve having died is only slightly better. About

Table 3
Distribution of *all* eminent economists (living and dead) according
to country of residence and share among them of those currently living

Rank	Country	Absolute numbers (N=1314)	Percentage in world total	Percentage share of living economists in country total
1	United States	694	52.8	85.6
	United Kingdom	277	21.1	44.0
5	France	74	5.6	35.1
	Germany	73	5.6	27.4
	Canada	35	2.7	97.1
	Italy	30	2.3	33.3
10	Israel	16	1.2	100.0
	Austro-Hungary	14	1.1	14.3
	Soviet Union	12	0.9	16.7
	Sweden	11	0.8	27.3
	Australia	11	0.8	90.9
	Netherlands	11	0.8	81.8
	Japan	10	0.8	100.0
15	Ireland	9	0.7	11.1
	Switzerland	9	0.7	44.4
	Belgium	8	0.7	62.5
	Norway	6	0.5	66.6
	Spain	4	0.3	25.0
20	South Africa	3	0.2	33.3
	India	2	0.2	50.0
	Poland	2	0.2	0.0
	China	1	0.1	100.0
24	Chile	1	0.1	100.0
	Denmark	1	0.1	0.0

three quarters of the eminent economists contributed by Sweden and Germany are no longer living. Of the 1314 leading economists in the world 729 are North American. 93% of the "rest of the world" (585) are Europeans (541).

Mobility

The *Who's Who in Economics* identifies eminent living and dead economists according to the (last) country of *residence* as well as of *birth*. This allows to calculate the net mobility flows between countries (Table 4).

Only five out of the 160 nations of the world have gained from the movement of eminent economists. By far the largest net inflow has been experienced by the United States (161), most of which (137) are still living and producing. The remaining four countries have extremely small net inflows, particularly with respect

Table 4
Mobility of eminent economists, selected countries

	Absolute		Net gain from mobility (living and dead economists) as percentage share of economists born in a country
	Total	(Living)	
<i>Gainers from mobility</i>			
United States	+161	(+137)	+30%
United Kingdom	+14	(+4)	+5%
Switzerland	+3	(+1)	+50%
France	+3	(+3)	+4%
Israel ^a	+2	(+3)	+14%
<i>Losers from mobility</i>			
Soviet Union	-24	(-15)	
Austro-Hungary	-36	(-23)	
India	-15	(-13)	
Poland	-10	(-10)	
Japan	-9	(-9)	
China	-8	(-8)	
Germany ^b	-12	(-17)	

^aIsrael has a net immigration of three living and a net emigration of one now deceased economist.

^bGermany has a net loss of 17 living economists, and a net gain of 5 now deceased economists.

to living leading economists. The gain relative to the number of eminent economists born in the United States is 30%. This percentage figure is surpassed (with a much lower absolute level) only by Switzerland where the net immigration is three, and the number of eminent Swiss born economists is six. It is worth noting that the United Kingdom is a net gainer from mobility, but this is mostly due to the inflow from British colonies of economists who are now dead. However, among living leading economists there is still a net gain, but it is quite small.

There are two great losers: The Soviet Union has lost 24 of its 36 eminent economists. The balance among the living is also strongly negative (-15). The other great loser is Austro-Hungary with a (net) emigration of 36 of its 50 eminent economists. Further losers are the communist countries Poland and China, and India and Japan, as well as Germany (mainly an aftermath of the Nazi-period, similar to Austria).

Sex

Those considered to be 'eminent economists' by their peers (who are mainly male) are almost entirely male. In only five of the 160 countries considered is there any female person among those included in the *Who's Who in Economics*. In all other 155 countries there is no female among the 'top' economists. Table 5 shows the

Table 5
The absolute number and the share of females among all eminent economists according to the country of residence

Country	Absolute number	Share of females in total number in the respective country		
		all, %	living, %	dead, %
United States	19	2.7	3.0	1.0
United Kingdom	10	3.6	4.1	3.2
Canada	1	2.9	2.9	0.0
France	1	1.4	3.8	0.0
Germany (Fed. Rep.)	1	1.4	0.0	1.9
All countries	32	2.4	2.9	1.6

absolute number and the percentage share of female economists in the five countries in which there is at least one.

In only two countries, the United States and the United Kingdom, there is more than one female economist. The percentage share among living and dead economists is 2.7% and 3.6% respectively. In Canada and France there is one living female economist, in Germany there is one deceased female economist (Rosa Luxemburg). Overall, there are 32 female among 1314 (male and female) economists, a share of 2.4%. There *is* an increase over time: among the dead, the female share is below 2% (seven women), among the living it is below 3% (25 women). No comment is needed; the figures speak for themselves.

Interpretations

The strong dominance of eminent economists living in the United States may be attributed to various influences.

Definition of 'eminence'

It may be argued that the way leading economists are defined reflects a bias in favour of American economists, and that the dominance shown in the previous tables is largely an artifact. Taking the number of citations in professional economics journals as the criterion for 'eminence' assumes that what matters is that an economist is cited by his peers,⁷ and that the recognition in journals matters. The two assumptions do not apply for the following sets of economists (who therefore have little chance of being called eminent, except when they have died):

- (a) economists who have been devoted mainly or exclusively to teaching, but may have had a strong impact through the oral tradition (which is rarely cited).
- (b) economists writing reports for the government or private firms and institutions which are kept secret, whose circulation is strongly limited, or which are published anonymously;
- (c) economists giving oral advice to government or private bodies.

In our context where we inquire into the reasons for the dominance of American economists the crucial question is the *relative* importance of these excluded categories for North America compared to the rest of the world, which boils down to Europe (93% of the rest of the world). However, no quantitative evidence is presently available.⁸

Even more important may be the tradition in which the research is published in a country. Journal publications play quite a different role in an economist's academic career. In North America there is the principle of "publish or perish" in journals⁹ for both young and established economists. A representative survey among 400 American universities has revealed that the promotion from assistant to associate professor (which is usually connected with tenure) requires the publication of at least three articles in professional economics journals. The condition for promotion to full professor is the publication of about twice this number (Boyes, Happel and Hogan 1984). The salary and research facilities (e.g. grants by foundations and those distributed within the university) are strongly dependent on a scientist's journal publications.¹⁰ The rate of return in terms of life-time earnings of publishing the first article in a refereed journal is significantly higher than publishing the first book (Tuckman and Leahey 1975). Moreover, the rate of obsolescence, i.e. the rate of not being quoted anymore by other scholars, is twice as high in the case of books than of journal articles. (Lovell 1973, Grubel 1981).

In Europe, on the other hand, an academic career generally necessitates passing an exam for which a book length monograph must be produced in addition to the doctoral dissertation ("Habilitation" in German speaking countries, "thèse de 4ième cycle" in France). This exam is, with few exceptions, taken between 30 and 45

years of age, which means there is no time nor incentive for journal publication. Once a chair is gained there is no need nor incentive to publish. In the European tenure system the salary and other perquisites (secretaries, assistants etc.) are attributed quite independent of publications. Those who, nevertheless, engage in scholarly publications are reluctant to do so in (refereed) journals because they run the risk of rejection, which would be unfavourable for their social position.¹¹ Book publications can be arranged with publishers without outside intervention. Overall, journals are less important in the Old than in the New World, because it takes years until journal publication enters a scholar's relevant opportunity set, and when it does, he or she is too far in their academic career to profitably engage in it.

In the past two decades journals seem to have become more important relative to books in both groups of countries (for the United States see *Fry* and *White* 1976). In Europe an increasing number of new economics journals have been founded (e.g. by North Holland, Nijhoff, Blackwell), but exclusively in English (with consequences for our topic to be discussed below). Despite this fact, there is a tendency to go back to requiring monographic works for an academic career. For the "Habilitation" (or for corresponding exams) a collection of journal articles may not be substituted for a monograph. Journal publications being generally of lower value for scholarly success in Europe, an individual researcher reacts rationally by publishing less in the form of articles. This biases what is counted as "eminent" to the disadvantage of economists in Europe (and in the rest of the non-American world).

Sample of journals

The sample of economics journals in which the citations are counted is biased in favour of the United States. The absence of some of the leading and most traditional European economics journals in *Blaug's* selection is striking. Thus, for France the *Revue d'Economie Politique* founded in 1891 is missing, for Germany the *Zeitschrift für die gesamte Staatswissenschaft* founded in 1845,¹² for Switzerland the *Schweizerische Zeitschrift für Volkswirtschaft und Statistik* founded in 1865, and for Italy *Economia Nazionale* founded in 1948. On the other hand, the leading American journals are fully covered in *Blaug*. In addition, the bibliographical source on which *Who's Who in Economics* is based is not beyond doubt. Some of the journals not included in *Blaug's* sample are already missing in the *Social Science Citation Index*.¹³ Moreover, the *Index* does not distinguish between self-citations and citations of others, and in joint articles only the first author is mentioned (see *Gerrity* and *McKenzie* 1978). It is not a priori clear in which direction this bias works.

An overrepresentation of American journals in *Who's Who* leads to an over-estimation of eminent economists attributed to America if it is more difficult for foreign

economists to publish in American journals than it is for Americans, and if economists favour citing economists of their own country, given the quality of a contribution. This may, for example, be the case because one is better acquainted with economists of one's own country, and quotes them for personal and career reasons.

Language and style

Given the overrepresentation of English language journals, or of those journals following and imitating this style,¹⁴ Anglo-Saxons tend to be overrepresented among eminent economists, provided these journals form a 'market' of their own: cross-citations within the market are more likely than citations of works published outside this market. Many or even most American economists are not able to fluently read professional material written in a language other than English, while most European economists today are well versed in English. This means that, given the same quality, there is a bias in favour of Anglo-Saxon contributions.

An economist with a native language other than English can only enter the Anglo-Saxon journal publication market if he or she adapts to the language, style and format common in Anglo-Saxon countries, and particularly in the United States. It is not sufficient to learn the language, it is also necessary to assimilate all aspects of communication with which (American) scholars transmit information. The English 'language' (in this broad sense) has since World War II become the *lingua franca* in economics. The choice of a lingua franca is often not efficient because the language selected in an overlapping generations framework depends on historical chance factors. A thrifter way to arrange communication between scholars is through *passive* bilingualism, in which each participant uses his or her own language, and is able to understand what the other economist is saying. It may be shown (see Lang 1986) that when there is one dominant business language the transactions costs arising will be borne by the minority group, in this case by the non-native American economists. Conversely, American economists earn a premium or seigniorage relative to the others (Breton and Mieszkowski 1977). Even if their papers were of equal quality as those of American economists, due to the additional transaction costs they are less likely to be able to enter the American publication and citation market. These differential costs may explain part of the American dominance among eminent economists.

"National Styles in Economics" (Johnson 1973) in quite another sense concerns the willingness to respond to survey questions on one's research activities. Non-American (European) scholars are less inclined, and less used, to provide information on their publication record because it is considered to be exhibitionist, and not in "good style". Indeed, the share of American non-respondents among living economists is 11%, whereas it is 14% among non-Americans. This is another factor contributing to the American domination in *Who's Who in Economics*.

Opportunities and incentives for good research

In the last three subsections we have discussed reasons why American economists might be overrepresented among *Blaug's* selection of eminent economists. While no quantitative proof can be offered, the evidence suggests that these factors explain only a small part of the dominance of American economists. There are good reasons to assume that American economists are truly dominant in terms of the quality of research produced and published. The reasons for this "true" dominance are economic as well as political and social. The country with the highest average per capita income offers the opportunities to provide scholars with particularly good research facilities. The American political and social system allows individual scholars to pursue their research in a liberal setting which compares favourably in a historical perspective. The beneficial preconditions have been used to create institutions (universities and other research centres) which provide the incentives for the production and publication of good research. It need not be stressed that comparable economic and political conditions do not exist in most Eastern and developing countries. In Europe, the preconditions may have obtained in former periods, but much was destroyed by the traumatic experience of the Third Reich. Today, the bureaucratised state run university systems do not provide sufficient incentives for, and sometimes even prevent, the production and publication of good research.^{1 5}

This interpretation is consistent with the revealed behaviour of economists themselves. As shown in Table 4 there has been a heavy influx of economists into the United States—who were either already eminent or who were given the chance to become eminent. There can be little doubt that America has greatly benefitted from this immigration, particularly from exiles from Nazi occupied territories. "By 30 June 1944, the staggering number of 279 649 persons from the Third Reich had found either temporary or permanent refuge in America. This emigration had a distinctly intellectual character; in Western history perhaps only in the flight of Greek scholars to Italy after the fall of Byzantium or in the dispersion of Athenians after the Persian conquest can one draw a parallel in that large percentage of intellectual and professional leaders of a nation were stranded on foreign soil" (*Pfanner* 1983, p. 14).

Notes

1. The nation connected with a Nobel Prize winner is his (or in the future perhaps her) country of residence and teaching at the time of receiving the prize, see *Lindbeck* (1985). Thus, *Hayek*, for example, is attributed to Germany, because he then lived and taught in Freiburg, rather than to Austria, the United Kingdom or the United States.
2. For empirical evidence see *Siegfried* and *White* (1973), *Quandt* (1976), *Hansen*, *Weisbrod* and *Strauss* (1978), *Grubel* (1979), *Hamermesh*, *Johnson* and *Weisbrod* (1982) and *Moore*, *Newman*, *Raisin* and *Thomas* (1983).

3. This is not simply a reflection of the size of a country's population. The United States and the United Kingdom also have the largest number of eminent economists per capita of population, surpassed only by Israel.
4. In 1984, the United Nations had 159 member countries. In addition, there are Switzerland, the two Koreas and the Republic of China (Taiwan) and mini-countries such as Liechtenstein, Andorra, Monaco and San Marino.
5. Canada has, of course, a French speaking part comprising 26% of the population.
6. Disregarding countries with only one or two eminent economists.
7. Even economists who are generally considered to be absolutely top are no longer cited by his or her fellow economists because the knowledge produced has become part of normal, established science. This has happened to economists such as Keynes, Samuelson or Hicks. This aspect is not further considered here, see the discussions in *Vandermeulen* (1972) and *Stigler and Friedland* (1975).
8. Future research should deal with the following questions: What share of the time budget of an academic economist is typically devoted to teaching and to research in America and in Europe? (In Germany, for example, the minimum teaching load of a full professor is 8 hours per week, while in the United States the minimum is much lower). What share of the overall time budget of an academic economist is devoted to activities not directly related to research and publishing? What is the comparative importance of government and business consulting in the two groups of countries?
9. See the extensive literature, e.g. *Skeels and Fairbanks* (1968), *Hexter* (1969), *Lofthouse* (1974), *Tuckman* (1976), *Win and Malone* (1978).
10. In addition to the empirical evidence quoted in footnote 2, see *Katz* (1973) and *Ault, Rutman and Stevenson* (1979, 1982).
11. And this social position is traditionally of much higher importance in Europe than in North America; indeed, "a European professor is a member of the national elite . . . who has to be in some sense a "rounded" member of society" (*Johnson* 1973, p. 66).
12. This journal is ranked second highest according to quality in a recently conducted survey (*Pommerehne* 1986).
13. See *Bourdieu* (1984, annexe) for a critical discussion of the potential biases in the *SSCI* due to the selection process among English and other language journals.
14. A sizeable number of Continental European journals publish exclusively or predominantly articles in English, and adopt the American style of presentation. This is, for instance, true for the German *Zeitschrift für die gesamte Staatswissenschaft* whose main title now is *Journal of Institutional and Theoretical Economics* and which publishes only articles in English.
15. See the insightful analysis by *Johnson* (1977).

References

1. American Economic Association (1985), *Index of Economic Articles 1886-1980*, R. D. Truin Inc., Homewood, Illinois.
2. D. E. AULT, G. L. RUTMAN, T. STEVENSON, Mobility in the labor market for academic economists, *American Economic Review, Paper and Proceedings*, 69 (May, 1979) 148-153.
3. D. E. AULT, G. L. RUTMAN, T. STEVENSON, Some factors affecting mobility in the labor market for academic economists, *Economic Inquiry*, 20 (January, 1982) 194-232.
4. M. BLAUG, *Economic Theory in Retrospect*, Cambridge University Press, Cambridge, 1985.
5. M. BLAUG, *Who's Who in Economics. A Biographical Dictionary of Major Economists 1700-1986*, 2nd ed., Wheatsheaf, Brighton, 1986a.
6. M. BLAUG, *Economic History and the History of Economics*, Wheatsheaf, Brighton, 1986b.
7. M. BLAUG, *Great Economists Before Keynes*, Wheatsheaf, Brighton, 1986c.
8. P. BOURDIEU, *Homo Academicus*, Editions du Minuit, Paris 1984.
9. W. J. BOYES, S. K. HAPPEL, T. D. HOGAN, Publish or perish: Fact or fiction? *Journal of Economic Education*, 15 (Spring, 1984) 136-141.

10. A. BRETON, P. MIESZKOWSKI, The economics of bilingualism, in: W. E. OATES (Ed.), *The Political Economy of Fiscal Federalism*, Heath, Lexington and Toronto, (1977) 261-273.
11. B. M. FRY, H. S. WHITE, *Publishers and Libraries: A Study of Scholarly Research Journals*, Heath, Lexington, Mass, 1976.
12. D. M. GERRITY, R. B. MCKENZIE, The ranking of Southern economics departments: New criterion and further evidence, *Southern Economic Journal*, 45 (October, 1978) 608-614.
13. H. G. GRUBEL, Citation counts for leading economists, *Economic Notes*, 8 (1979) No. 2, 134-145.
14. H. G. GRUBEL, Canadian economists' citation and publication records, *Canadian Journal of Higher Education*, 11 (1981) No. 1, 27-43.
15. D. S. HAMERMESH, G. E. JOHNSON, B. A. WEISBROD, Scholarship citations and salaries: Economic rewards in economics, *Southern Economic Journal*, 49 (October, 1982) 472-481.
16. W. L. HANSEN, B. A. WEISBROD, Towards a general theory of awards, or, do economists need a Hall of Fame? *Journal of Political Economy*, 80 (March, 1972) 422-431.
17. W. L. HANSEN, B. A. WEISBROD, R. P. STRAUSS, Modelling the earnings and research productivity of academic economists, *Journal of Political Economy*, 86 (August, 1978) 729-741.
18. J. H. HEXTER, Publish or perish - A defense, *Public Interest*, 17 (Fall, 1969) 69-77.
19. H. G. JOHNSON, National styles in economic research: The United States, the United Kingdom, Canada, and various European countries, *Daedalus*, 102 (1973) No. 1, 65-74.
20. H. G. JOHNSON, The American tradition in economics. *Nebraska Journal of Economics and Business*, 16 (1977) No. 1) 17-26.
21. D. A. KATZ, Faculty salaries, promotions, and productivity at a large university, *American Economic Review*, 63 (June, 1973) 469-477.
22. K. LANG, A language theory of discrimination, *Quarterly Journal of Economics*, (May, 1986) 363-382.
23. A. LINDBECK, The prize in economic science in memory of Alfred Nobel, *Journal of Economic Literature*, 23 (March, 1985) 37-56.
24. S. LOFTHOUSE, Thoughts on 'Publish or Perish'. *Higher Education*, 3 (1974) No. 1, 59-80.
25. M. C. LOVELL, The production of economic literature: An interpretation, *Journal of Economic Literature*, 11 (March, 1973) 27-55.
26. W. J. MOORE, R. J. NEWMAN, J. RAISIN, R. W. THOMAS, A quality-adjusted model of the academic labor market: The case of economists, *Economic Inquiry* 21 (April, 1983) 241-254.
27. H. F. PFANNER, *Exile in New York: German and Austrian Writers after 1933*, Wayne State University Press, Detroit (1983).
28. W. W. POMMEREHNE, Die Reputation wirtschaftswissenschaftlicher Fachzeitschriften: Ergebnisse einer Befragung deutscher Ökonomen, *Jahrbücher für Nationalökonomie und Statistik*, 201 (May, 1986) 280-306.
29. R. E. QUANDT, Some quantitative aspects of the economics journal literature, *Journal of Political Economy*, 84 (August, 1976) 741-755.
30. J. J. SIEGFRIED, K. J. WHITE, Financial rewards to research and teaching: A case study of academic economists, *American Economic Review, Papers and Proceedings*, 63 (May, 1973) 309-315.
31. J. W. SKEELS, R. P. FAIRBANKS, Publish or perish: An analysis of the mobility of publishing and nonpublishing economists, *Southern Economic Journal*, 35 (July, 1968) 17-25.
32. G. J. STIGLER, C. FRIEDLAND, The citation practices of doctorates in economics, *Journal of Political Economy*, 83 (June, 1975) 477-507.
33. H. P. TUCKMAN, *Publication, Teaching, and the Academic Reward Structure*, Heath, Lexington and Toronto (1976).
34. H. P. TUCKMAN, J. LEAHEY, What is an article worth? *Journal of Political Economy*, 83 (October, 1975) 951-967.
35. A. VANDERMEULEN, Editor's note, *Western Economic Journal*, 10 (1972) No. 2, 466.
36. E. L. WINN, R. P. MALONE, Publishing, perishing, and the faculty 'quality', *Journal of Economic Education*, 10 (Fall, 1978) 56-57.

