The Costs of Immigration to Taxpayers: Toward a Uniform Accounting Framework

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Large scale immigration to the United States and a sluggish national economy have brought to the forefront of the current immigration policy debate, the question of whether immigrants fully pay—in the form of taxes—for the public services they use. Recent estimates of the costs of immigration differ so widely that they have confused rather than enlightened that debate. This paper argues that a uniform accounting framework must be agreed to if future studies are to provide credible and reliable estimates of costs and benefits upon which immigration policy can be formulated. The key conceptual, factual, and accounting issues that are to be addressed for the development of such a framework are outlined.

INTRODUCTION

The question of whether immigration generates more costs than benefits for the nation has emerged as a major public issue in recent years. This prominence reflects several developments. First, the number of immigrants who have entered the country during the last decade rivals the peak number of immigrants at the beginning of the century. Second, these immigrants are concentrated in a few states—California, Florida, Illinois, New York, and Texas—and within those states in such large metropolitan areas as Los Angeles, Miami, New York, and Chicago. For instance, 2 out of 5

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residents in Los Angeles today are foreign-born. Third, although today's immigrants come from all parts of the world, the vast majority come either from Mexico and Central America on the one hand or Asia on the other. Fourth, the country has been experiencing major economic and social changes made worse by a deep and lengthy recession that began in 1990. These changes include major cuts in defense expenditures, restructuring of the economy due to heightened international competition, slow employment growth, and an unwillingness among the electorate to tax itself to support public service programs. Nowhere have these changes been felt more strongly than in California, where the nation's highest immigration rates coincided with a deep and long recession. California voters' passage of Proposition 187, which would deny illegal aliens access to social, health, and education public benefits is only one manifestation of a new social climate.

In this new climate, immigration and immigrants have been singled out as a major contributor to the growing demands placed on public programs and services, and thus to the budgetary deficits that several states and localities have had to confront in recent years. Unable to raise public revenues through increased taxes, and required by law to balance their budgets, states and localities have had no alternative but to cut the level of benefits they provided to all their residents, thus resulting in a perceived deterioration in standard of living for all.

Immigrants, like citizens, however, not only consume public services they also pay taxes. As a result, two questions currently dominate the immigration policy debate:

1. Do immigrants' contributions to public revenues cover the costs of the public services they receive?
2. What is the *net* budgetary cost (or benefit) to state and localities of providing services to immigrants, and to illegal immigrants in particular?

While the first question is the object of attention both in the United States and in other western nations currently experiencing high levels of immigration, the second is unique to our federalist form of government. The three different levels of governments—federal, state, and local—are responsible for the financing and/or delivery of different kinds of services. The lower levels of government are principally responsible for education and protective services—police and fire—and share with the federal government in the costs of providing health and welfare services. Immigration, although a federal responsibility, may place a disproportionate demand on those services provided by state and local governments, thus generating a possible imbalance (Vernez, 1993).

Several recent studies have addressed these two questions. Their findings, however, differ so widely that policymakers and the general public are understandably confused as to what to believe. For example, the range of national estimates of the effects of immigration on the public fisc reported in the media and circulating in policymaking circles differ by no less than $67 billion dollars—from a $25 billion annual surplus to a $42 billion annual deficit (e.g., Huddle, 1993; Passel, 1994).

There are two main reasons for these disagreements and, hence, for the absence of a reliable estimate of the actual net public costs (benefits) of illegals or of immigrants as a whole. First, the data needed to make detailed cost/benefit calculations are unavailable. This forces each study to make assumptions about immigrants' service usage and revenue contributions—assumptions which are often mistaken. Second, analysts disagree on (a) which public revenues and which services, hence costs, ought to be included in estimating the costs of immigration; (b) on how to define and categorize immigrants; and (c) how to measure costs over which period of time (Vernez & McCarthy, 1996).

When the press and the politicians treat every new study as accurate and definitive, it only adds to the confusion in the public mind about whom and what to believe. To alleviate this problem, in the future, a uniform accounting framework needs to be developed to address the key conceptual issues which have plagued past studies of the costs of immigration.

This paper outlines the main issues that need to be addressed to develop such a framework. They are grouped into three categories:

- Conceptual and accounting issues
- Behavioral assumptions and data availability
- Cost allocation issues

To illustrate these issues we use examples from ten post-1990 and well publicized studies—four national and six state and local (see list of references). These studies were reviewed carefully and comparatively to identify why their estimates of costs of immigration varied so widely and determine what should be done to develop more credible estimates.

CONCEPTUAL AND ACCOUNTING ISSUES

To develop a consistent "accounting framework" the following four questions must be addressed at the outset: (1) Who is an "immigrant" and what subgroups of immigrants should be distinguished? (2) Which public services ought to be included? (3) Which public revenues ought to be included? and (4) What is the accounting time period?

Defining and Grouping Immigrants

How to define and categorize immigrants and natives are important policy as well as analytical decisions. How an "immigrant" is defined not only affects the count of immigrants but also which costs and revenues are attributed to immigrants, and hence the outcome of the study. Different definitions and categories also imply different policy concerns.

Defining "Immigrant." There is general agreement that all *foreign-born non-citizens* should be defined as "immigrant."[1] There is less agreement about how to treat the children of immigrants born in the United States and the foreign-born who are naturalized citizens.

Past studies of the costs of immigration have generally treated the costs of providing public services to the citizen children of immigrants uniformly; they have excluded them from the costs of servicing immigrants, with one significant exception: the citizen children of illegal immigrants—some studies have excluded them, while others have included them in the "costs of immigrants" column.

Although the choice between these two alternatives is not clear cut, it will affect costs significantly. One study (Romero, et al., 1994) estimated that attributing the costs of servicing citizen children to their illegal immigrant parents added in excess of 25% to the public service costs of illegal immigration.

The argument for exclusion of citizen children of immigrants is a legal/constitutional one: children born on U.S. soil are guaranteed citizenship by the U.S. constitution and are citizens by definition. They are entitled to the same services available to other citizens, and hence should be treated as "native-born." But, if this argument holds for citizen children, it should also hold for the foreign-born who become naturalized citizens. Consistency then would seem to require that the 30% or so of immigrants who have become naturalized citizens should be excluded from the "immigrant" category.

The argument for inclusion of citizen children of immigrants as "immigrant" is a pragmatic one: if their parents had not immigrated, these citizen children would not have been born here and the public costs of providing services to them would not have been incurred. Hence, their costs should be included with those of their immigrant parents.

Whichever choice is made should be consistent. We see no rationale for including the costs of citizen children with those of their illegal parents,

[1] Even this cannot be taken for granted. Several studies of costs of immigration have excluded immigrants who had entered the country prior to 1970.

while excluding those costs for citizen children of other immigrants (or for naturalized citizens) as some studies have done (e.g., Huddle, 1993; CIS, 1994). In future studies, the costs of citizen children should be treated uniformly for all immigrant groups. To accommodate both views, they could be displayed separately from the costs of their immigrant parents; in any event, they should not be included in the costs attributed to all other native-borns.

Appropriate Unit of Analysis. The treatment of the citizen children of immigrants also has implications for the appropriate unit of analysis—an issue overlooked by all studies. They all allocated the costs to *individual* immigrants, but accounted for public revenues at the *family* level. An accounting inconsistency arises when the costs of servicing some members of the family are excluded in the "cost" column, but these same members are included in the "revenue" column. The result is an overestimate of the "tax revenues" collected to cover the estimated costs.

Another problem defining the appropriate "immigrant" family is how to treat mixed adult "immigrant" and "native-born" family units, of which there are many. In the studies reviewed, if the family head is "foreign-born," the family is labeled "immigrant" and all revenues are accounted against the costs attributed to the immigrant head of family, leading to an underestimate of net costs. Arguably, mixed families classified as "immigrant" might be canceled out by those classified as "native-borns"—but, that is an empirical question to which we do not yet know the answer.

Grouping Immigrants and Native-Borns. Most recent studies have singled out undocumented immigrants as a separate group reflecting the current concern with illegal immigration. The studies differ, however, in how they have categorized other immigrants. Some distinguish immigrants who are beneficiaries of a specific federal policy, i.e., immigrants amnestied under IRCA, or according to date of entry, i.e., immigrants who have entered since 1970 or 1980. Others simply group all immigrants together regardless of status and date of entry. Authors of these studies have agreed on only one thing: to group native-borns into one single category.

A priori, there is nothing compelling about these categories. Other categorizations may be just as justifiable, such as:

- Current criteria for permanent entry: i.e., humanitarian, family reunification, or employment-related.
- Expected use of public services, i.e., high vs. low users of public services.

- Factors expected to affect life-time contributions to public revenues: e.g., skills and education levels, ability to speak English at entry.

Different categorizations imply different policy concerns. Distinctions based on legal status, date of entry, or eligibility for public services reflect the current policy focus on undocumented immigration and attempts by state and local governments to obtain federal funding to compensate them for bearing what they believe is a disproportionate share of the costs of providing services to immigrants. But these are not the only issues that might be addressed. If, for example, one is interested in maximizing contributions to revenues, then the focus should be on those characteristics which differentiate immigrants in terms of their income. Alternatively, if the purpose were to determine how well the current criteria used to determine eligibility for legal entry meet the objective of minimizing the net fiscal costs of immigration, then distinctions should be drawn among immigrants in terms of how they qualified for entry, e.g., refugees, family reunification, economic immigrant. Which distinctions are made among immigrants directly determines the conclusions that might eventually be reached. We return to this issue in the last section.

Services to be Included

Which services and which revenues to include in studies of the fiscal costs (benefits) of immigration are perhaps the most critical issues affecting their eventual findings. Different decisions made in this regard can mean the difference between showing a net fiscal surplus or a net fiscal deficit for any subgroup of immigrants or native-borns as was shown in the previous section.

Studies of the *national* costs of providing services to immigrants have typically focused on services that are provided *directly* to individuals such as education and social services, some county and local costs, transfer payments—although there are disagreements on how to account for "social insurance programs"—and grants-in-aid to state and local governments which constitute about half of federal expenditures (see Table 1). Excluded are large federal budget items such as national defense, research and development, general governmental and administrative functions provided by legislative bodies and executive agencies (e.g., INS), and interest paid on the national debt.

In contrast to the national level studies, state and local studies have typically included all the costs accruing to that level of government includ-

TABLE 1

Federal Expenditures, by Major Categories of Expenditures: 1992

Categories of Expenditures	Dollars (Billions)	Percent
Purchase	*448.8*	*30.8*
National defense	313.8	21.5
Nondefense	135.0	9.2
Transfer payments (net)	*624.5*	*42.8*
To persons	608.2	41.7
Rest of world	16.3	1.1
Grant-in-aid to state & local government	*171.4*	*11.7*
Net interest	*187.1*	*12.8*
Interest paid	219.9	14.7
Less interest received	(−32.8)	(−2.2)
Subsidies less current	*27.5*	*1.9*
Surplus	31.7	2.2
Subsidies less govt. surplus	(−4.1)	(−.3)
Total	1,459.3	100.0

Source: Survey of Current Business, June 1994, Vol. 74, number 6, Table 3.2.

ing general governmental functions. Hence, the treatment of general government functions across studies is inconsistent.[2]

Treatment of Indivisible Goods and General Governmental Functions. Excluding large components of federal expenditures and general governmental functions—e.g., national defense, Research and Development, debt payments, highway construction and maintenance—significantly reduces the public costs attributed to immigrants and can be justified on only one of two grounds: (1) either immigrants are deemed not to receive any benefits from those services; or (2) these services—public goods with large indivisibilities—would be provided in the same quantity and quality in the absence of any immigration, i.e., the marginal cost of providing these services to immigrants is nil.

Both rationales for exclusion are questionable. There is no foundation

[2]Clearly, this issue arises only in comparisons across studies. It does not arise within the context of one study comparing relative costs and revenues among different population subgroups so long as the same services and revenues are included for each population subgroups, as all studies reviewed here do. It may however affect the completeness of the study's findings.

to support the "no benefit" argument. Immigrants do benefit from a democratic form of governance and from the general infrastructure and other support services conducive to a stable political environment and to economic growth.

The "zero marginal cost" argument is more difficult to dismiss offhand; it has merit from a purely economic accounting point of view. The difficulty with it, however, is when and for whom does it apply. The same argument could be applied across generations of the native-born not to mention the citizen children of immigrants (see earlier discussion). But as a nation, we have opted to make everyone pay (albeit according to a progressive tax schedule) for general governmental functions and for indivisible goods, both for equity reasons and, because everyone benefits to some extent from such goods and services. Excluding immigrants from "paying" for these services would be akin to arguing that native-borns, including low-income native-borns, should be "subsidizing" immigrants for such services.

If one accepts, as we do, that immigrants ought to pay for general government functions and public goods, which portion of the costs for such services should be deemed to immigrants?

Treatment of Social Insurance Programs. Another set of programs which present special conceptual difficulties are social insurance programs, e.g., Social Security, Medicare, unemployment insurance, and workmen's compensation. Experts disagree on how to treat them, and hence different studies have dealt with them in different ways. These programs raise three interrelated questions to which there is no uniquely "right" answer.

The first question is whether to include social insurance programs at all in computing the fiscal costs of immigration. Arguably, these programs provide pension, job insurance, or health insurance benefits that are primarily self-funded, even though revenues collected for some of these programs may be mixed with general fund revenues. To the extent that such a program is "truly" self-funded, this argument speaks for its exclusion.[3] In this event, payroll taxes (or other revenues) used to pay for it should also be excluded from the revenue side.

Most social insurance programs, however, have a redistributive function with some groups of payers receiving more in benefits than they con-

[3]By "truly," we mean that no general funds are used to cover a "deficit" between revenues and expenditures in these programs for any of the subgroups considered by a study.

tribute in revenues; and vice versa.[4] Moreover, the funds raised from payroll taxes for these programs are treated as general funds and drawn upon on an ongoing basis. Hence, these programs should be included in costs of immigration studies. But how should these costs be assessed?

To date, two sharply differing approaches have been used. One approach, used for social security (the largest of these programs), has been to attribute to immigrants the estimated value of payments actually made to the immigrants during the time period considered by the study (usually a fiscal year). Since most immigrants are not yet of retirement age, the benefits so estimated are currently quite low. The rationale for this approach is that the children of immigrants will eventually pay for the retirement of their parents. Call it the "intergenerational" accounting approach.

Another approach has been to prorate (i.e., distribute evenly) the total payments to foreign-borns in proportion to the ratio of the number of immigrants in the category considered to the total number of immigrants. Because, recent studies have focused on immigrants who have arrived most recently, this method attributes a higher "cost" to immigrants than the first. For instance, CIS (1994), which used the latter method, estimated social security costs "incurred" by post-1970 immigrants to be ten times higher ($704) than Passel (1994), which used the first method ($66). In this latter view, new immigrants, are "held liable" for supporting the pensions of previous waves of immigrants. Call it the "intra-immigrant" accounting approach.

Whether one should adopt one of these or any other approach is not just a technical question. It depends on one's view of who should be paying for whom when there is a long time lag between contributions and receipt of benefits. Considering that contributions to a "pension/retirement" program are payments for benefits derived at a later time in one's life, a lifetime actuarial method (see below) to estimate the costs of social insurance programs should be preferred.

Ongoing vs. Lifetime Costs

This discussion raises an even broader issue: should we measure costs and contributions at a particular point in time, (the "ongoing approach"), or over the lifetime of each individual (the "lifetime" approach). When there is a large inflow of young immigrants in a short period of time, as

[4]The redistributional characteristics of social insurance programs is complex, particularly as pension programs are concerned, because they depend not only on lifetime income, but also longevity after retirement.

there is now, they may make a lower use of services today than they will at a later time in their lives, particularly after they leave the labor force. In the meantime, they contribute taxes to the general revenues. The "ongoing" approach to cost accounting is the appropriate one if the primary concern is with balancing the budget on an annual basis. But, if one views the payments made today as downpayments for benefits that may be redeemed later, the "lifetime" approach to assessing costs of immigration is the appropriate one.

Neither approach is inherently right or wrong. Each provides a different piece of information and answers a different set of questions that are particularly complex, most particularly so for social insurance programs (see above) and services which have an investment component—that is, where an initial expenditure of resources is expected to have a long-term payoff. A classic case of such an investment is education which involves a large investment in the early life of an individual and large returns in the form of higher earnings, and hence, public revenues much later in life. Health care services may also involve large trade-offs over time: higher costs in a given year in the form of preventive health care for lower costs later in the form of catastrophic or other social costs.

Revenues to be Included

Just as the studies reviewed did not include all the public services from which immigrants derive benefits, neither do they include all revenues accruing to the public fisc. Typically, the studies have been more comprehensive on the revenue side at the national level, and more comprehensive on the costs side at the state and local level, introducing a bias in the estimates of net fiscal surplus or deficits.

Five major types of revenues have been excluded or otherwise treated unevenly across studies:

- Bank, corporation, and insurance taxes,
- Commercial property taxes,
- Interest earnings,
- Fines, fees, special assessments, and special funds taxes,
- Utility revenues.

The *bank, corporate, and insurance tax* is the largest tax that is omitted at both the federal and the state levels (see Table 2). Omission of these revenues is all the more problematic because the costs of providing public services to businesses and banks are typically not deducted from the costs

TABLE 2

Annual Public Revenues by Level of Government and by Source: 1992[a]

Sources of Revenues	Federal		State and Local Governments		State of California		County of Los Angeles[a]	
	$BIllions	Percent	$BIllions	Percent	$BIllions	Percent	$BIllions	Percent
Personal tax & non-tax receipts	490.8	41.5	154.0	18.4	17.7	21.7		
Income taxes	478.0		116.7		17.2			
Estate & gift taxes	11.3				.5			
Non-taxes	1.4		18.3					
Other			19.0					
Corporate profits tax accruals	120.2	10.2	26.0	3.1	5.7	7.0		
Indirect business tax & non-tax accruals	81.3	6.9	421.3	50.3	31.1	38.3	3.5	37.2
Sales tax			200.8		20.8		.1	
Excise tax	46.8				.3		.03	
Property tax			177.7				2.2[b]	
Custom duties	18.3							
Non-taxes	16.2							
Other[c]			43.0		10.1		1.2	
Contributions for social insurance	490.7	41.5	64.9	7.7			1.0	10.6
Grants-in-aid from other levels of gvts.			171.4	20.4	26.7	32.9	4.9	52.1
Total	1,183.0	100.0	837.8	100.0	81.2	100.0	9.4	100.0

Sources: Survey of Current Business, June 1994, Vol. 74, number 6, Table 3.2; California State Budget; and U.S. Bureau of Census for Los Angeles County.
Note: Individual items may not add to totals because of rounding.
[a]Figures for Los Angeles County are for the year 1989-90.
[b]Residential properties contribute 63 percent to total property tax revenues and commercial properties 37 percent.
[c]Includes assorted mix of fines, fees, special assessment and special funds revenues.

allocated to individual residents inflating costs and deflating revenues attributed to immigrants. Either the costs of services to businesses should be excluded from the costs attributed to immigrants, or a portion of these revenues should be deemed to be contributed by immigrants.

Commercial property taxes also raise sizable revenues for counties. For instance, they contribute 37% of the total property taxes levied by the County of Los Angeles. However, the costs of providing local services to businesses have typically not been deducted from the overall costs allocated to immigrants leading to the same bias as noted above.

We noted earlier that *interests* on general debt are not always included in the "costs of services." Similarly, interest earnings from investment funds or overnight tax revenue investments are not accounted on the revenue side. The issue would be of lesser import if the two were generally in balance, but they rarely are. The federal government has consistently run a fiscal deficit in recent times. At the local level, however, the reverse has often been true. For instance, the county of Los Angeles earned more interest than it paid in debt service in 1990: $309 vs. $240 million.

Fines, fees, special assessments and special funds revenues constitute a significant portion of the revenues levied by federal, state and local governments. For instance, they contribute 15% to California state general and special revenues and 35% of general revenues to the County of Los Angeles. The studies we have reviewed generally have included the major special funds: motor vehicle fees, tobacco and liquor taxes, and horse racing taxes. Generally excluded, however, are smaller special funds revenues such as regulatory licenses and permits, penalties on traffic violations, rentals on state property, state and local beach and park service fees, oil and gas revenues, and other miscellaneous items.

Utility revenues are generally small, but can vary significantly across jurisdictions.

These two last categories of revenues raise two additional issues. The first is a consistency issue. If any of these revenues are used to defray the costs of services included on the costs side, then they should be included on the revenue side. Studies appear to have been uneven in implementing this basic principle of accounting. The second issue concerns special funds or user fees that are earmarked to be spent for a specific purpose. To the extent that no general funds are used to cover a portion of the costs of that service, they arguably can be excluded. Another approach, supported by research findings, is that earmarked public funds are a substitute, though imperfect, for general funds, and, hence, all public funds, including categorical funds should be treated as general funds.

BEHAVIORAL ASSUMPTIONS AND DATA AVAILABILITY

Until such time as adequate resources are provided for collecting the necessary data on the services used and the revenues contributed by immigrants, studies of the costs of immigration will continue to rely on proxy information. As a result, we must be prepared to accept broad variations in estimates regardless of whether agreement can be reached on uniform treatment of the conceptual questions discussed in the preceding subsection. Below, we outline the main problems with the use of such proxy information and illustrate how the use of different proxies can lead to significant variations in findings.

Estimating Use of Public Services

In lieu of direct measures of service utilization by immigrants, the assumption most commonly made by the studies reviewed is that immigrants use services in proportion to their numbers, with no adjustments made to account for lower or greater intensity of use over the period of time considered. Direct census and administrative data on actual service usage have been used in only a few instances including primary and secondary education, occasionally criminal justice, and emergency medical assistance (Medicaid). But even in these instances, assumptions had to be made that significantly shaped the results.

In the case of education, a key factor affecting the estimated costs is the estimate of the number of undocumented children who are of school age and actually attend public schools. The difficulty of making reliable estimates of this number is illustrated by the fact that estimates of the number of illegal immigrant children in California's schools differ by 20% or more depending on the study (Romero, et al., 1994; Clark, et al., 1994).

In the case of health care, the estimates are based on surveys of utilization of health services by the amnestied population used as a basis to claim federal reimbursement under IRCA's State Legalization Impact Assistance Grants (SLIAG). Alternatively, estimates of the use of emergency services covered under the Federal Omnibus Budget and Reconciliation Act of 1986 (OBRA) have also been used. In both instances, only a portion of total public health costs—primarily emergency and prenatal care—were included.

A 1991 RAND pilot survey of Salvadoran and Filipino immigrants residing in Los Angeles allowed us to assess the extent to which the "proportionality rule" used to allocate the costs of most other services may be biasing the results. These data were also used to verify the common assumption that utilization of specific services does not vary with immigration status or income (DaVanzo, et al., 1994). The data raise serious questions about the validity of these assumptions.

The survey asked respondents whether they or anyone in their family had used a broad array of public and private services at least once over the past twelve months. Table 3 shows the results for four types of services: income transfer and nutrition programs, health services, health insurance coverage, and other services (e.g., education, libraries, and public transport).

The following observations affecting the estimates of costs of immigration can be made from our survey results:

- Undocumented immigrants are more likely than their legal counterparts to use public hospitals and clinics and less likely to participate in HMOs. A potential reason for this pattern may be found in the pattern of public versus private insurance coverage: undocumented immigrants are less likely to be covered by private insurance or an HMO.
- Although undocumented immigrants themselves are not eligible for AFDC or food stamps, they benefit indirectly from these programs either through their eligible children or relatives. Should a portion of these costs be deemed to undocumented immigrants?
- The extent to which children attend public or private school appears to depend both on income and immigration status. The children of the low-income Salvadoran immigrants attend public school exclusively. The only exception is for a small percentage of children (7%) of Salvadoran permanent residents. In contrast, from one out of six to one out of four school age children of Filipino immigrants attend private or parochial schools.

DaVanzo, et al. (1994) assessed the extent to which immigration status, family income, and other factors might affect use of services. The results of their multivariate analysis suggest that the use of public services is generally not affected by immigration status, including undocumented status. The main factors affecting the use of transfer programs and health services are income and number of children, most particularly children aged five or under. In addition, the use of special purpose services (libraries, public transport, parks and recreation) is affected by factors influencing the need for the service in the first place, such as income, number of children, English proficiency, or desire to change immigration status. In brief, our results do not support the "proportionality" assumption for service utilization across immigrant groups. There is no reason to believe that it would hold across native groups either.

TABLE 3

Use of Services by Immigration Status and by Type of Program: Salvadoran and Filipino Immigrants: 1991

	Salvadoran Immigrants					Filipino Immigrants		
Type of Program	Undocumented	TPS[a]	Temporary Visa	Permanent Resident	All	Permanent Resident	Citizen	All
Transfer Programs								
AFDC	14%	10%	13%	6%	9%	2%	1%	1%
Food stamps	22	17	18	14	17	4	1	2
WIC	33	28	34	20	26	6	0	2
Unemployment compensation	8	8	8	10	9	13	8	10
Worker's compensation	4	6	0	8	6	3	3	3
Health Services								
Public hospital	30	24	29	21	25	10	10	10
County, free, or family clinics	52	50	53	35	45	16	10	12
Prenatal clinics	17	20	16	14	16	6	4	4
Private doctor or clinic	31	48	39	51	45	52	62	58
Health Insurance Coverage								
Any health insurance	39	40	37	44	41	87	90	88
Government program	35	28	32	22	28	26	26	26
Private insurance	3	7	11	15	10	56	58	57
HMO	7	10	3	18	12	40	53	49
Other Services								
School attended								
Public	100	100	100	93	95	85	76	78
Private or parochial	0	0	0	7	5	15	24	22
Public transport	70	61	66	60	63	25	28	26
Recreation	52	46	37	58	52	62	71	66
Libraries	21	22	32	32	28	47	71	62
Average annual income (dollars)	10,250	10,800	11,250	13,000	11,485	37,630	50,000	47,325
N	92	89	38	161	380	89	176	265

Source: DaVanzo, et al. (1994) Tables 5.5-5.9, pp. 46-49.
[a]TPS means Temporary Protective Status.

Estimating Public Revenues

In lieu of direct measures of the public revenues collected from immigrants, estimates of revenues collected are made by first estimating, i.e., making assumptions about, a number of factors including: (1) individual earnings; (2) family incomes; (3) portion of income earned in the United States that is spent abroad; (4) incidence of actual payroll deductions and actual tax filings; (5) consumption of items subject to taxation; (6) tax rates applicable to each individual, or groupings of "similar" individuals; and (7) from whom the revenues are actually collected, either individuals, families, or businesses.

Of these seven factors, only individual earnings and family income are fairly accurately measured for foreign-borns by the decennial censuses or by the annual Current Population Surveys (CPS). A major problem with Census or CPS data is that they do not provide information on immigration status; hence assumptions must be made about the earnings and income profile of immigrants with different immigration status. Assumptions made regarding the other factors needed to estimate public revenues from immigrants have also varied significantly across studies. Those with the largest effect on findings are discussed below.

Assumptions Regarding Remittances. Some studies assume that immigrants spend all of their income in this country while others estimate that a portion of that income is sent home in the form of remittances. Estimates of remittances vary from 6 to 12% across studies (King, 1994; ISD, 1992). Of course, the relative value of remittances can be expected to vary between immigrants of different immigration status, length of stay in the country, and income. These variations are typically ignored. Indeed, we have encountered just such variations in our survey of immigrants from El Salvador and the Philippines. Table 4 suggests that the proportion of families sending remittances, as well as the amount of these remittances is similar across income groups, e.g., \$900 to \$1400 annually per family. As a percent of income however, remittances vary from a low of 2% to a high of 13%, being much higher for the poorer Salvadorans than the better-off Filipinos.

Incidence of Actual Payroll Deductions and Actual Tax Filings. Estimates of the incidence of actual payroll deductions and federal and state tax filings vary significantly across studies. Some assume high rates of compliance while others accept the findings of one study which measured a 56% compliance for payroll tax payments among undocu-

TABLE 4

Average Remittance and Income by Immigration Status: Salvadoran and Filipino Immigrants: 1991

	Salvadoran Immigrants					Filipino Immigrants		
Remittance/Income	Undocumented	TPS[a]	Temporary Visa	Permanent Resident	All	Permanent Resident	Citizen	All
Percent families sending remittances	73	82	92	72	77	69	75	72
Average income ($)	10,250	10,800	11,250	13,000	11,567	37,630	50,000	42,083
Average annual remittance ($)	946	1,311	1,493	1,039	1,132	910	1,330	1,197
Remittance as percent of income	9.2	12.1	13.3	8.0	9.8	2.4	2.7	2.8

Source: 1991 RAND survey of Salvadoran and Filipino immigrants in Los Angeles.
[a]TPS means Temporary Protective Status.

mented immigrants and an 83% compliance among legal immigrants (North & Houston, 1976).

The 1991 RAND survey of Salvadoran and Filipino immigrants suggests that payroll tax deductions and federal income tax filing are highly dependent on immigration status (Table 5). About half of the illegal immigrants working at the time of the interview had payroll taxes deducted and less than 40% had filed a federal or state tax return. Permanent immigrants reported the highest incidence of payroll tax deductions and income tax filings. But even among those with the same immigration status, there are variations among immigrants. Salvadoran permanent residents were less likely than Filipino permanent residents to have their payroll taxes deducted or to file federal tax returns, reflecting significant differences in occupational structure and incomes.

Although our findings are based on a relatively small sample, and cannot be generalized to all immigrants, they support the hypothesis that the incidence of public revenues varies by immigration status, independently from income.

COST ALLOCATION ISSUES

The preceding discussion raises a number of critical cost allocation questions that have either been ignored or implicitly deemed of lesser importance in the studies we have reviewed. The most important of these are discussed below.

Costs to Individuals vs. Costs to Households

A number of federal, state, and local entitlement benefits and services are provided directly to individuals: e.g., cash payments, social security, schooling, nutrition programs, and training programs. However, even in such cases, allocation of the full value of the payments or full cost of the service to the eligible recipient is not without ambiguity. Other individuals may directly or indirectly benefit from the payment or provision of the service. Such is the case, for instance, of the illegal parents of citizen children eligible for AFDC payments as noted earlier. And such is the case with nutrition programs, which are preventative in nature, and indirectly serve general public health interests and might even save on future remedial or rehabilitation services.

In cases such as those cited above, the question arises whether the value of the benefits accruing to others should be deducted from the costs

TABLE 5

Federal Tax Filings and Payroll Deductions by Immigration Status: Salvadoran and Filipino Immigrants: 1991

Tax Filings and Payroll Deductions	Salvadoran Immigrants					Filipino Immigrants		
	Undocumented	TPS[a]	Temporary Visa	Permanent Resident	All	Permanent Resident	Citizen	All
Filed federal taxes[b]	38%	54%	63%	84%	64%	91%	95%	93%
Payroll deductions[c]								
Any	50	52	53	72	60	97	96	97
Federal taxes	46	51	37	72	57	94	96	95
State taxes	50	49	40	72	57	94	96	95
Social Security	46	51	44	70	57	91	91	91
Health insurance	9	6	12	25	15	47	62	52
Average annual income (dollars)	10,250	10,800	11,250	13,000	11,567	37,630	50,000	47,325

Source: DaVanzo, et al., 1994, p.51.
[a]TPS means Temporary Protective Status.
[b]Percent of all respondents.
[c]Percent of respondents who worked the week preceding the interview.

assigned to the individual immigrant recipients? The answer to this question will depend on one's view of immigration. If one believes that the service would not have been provided if the immigrant were not here in the first place, then the full costs ought to be allocated to the immigrant. But if one believes that the immigrant would be here anyway, then only the costs net of benefits to others ought to be allocated to the individual immigrant.

A different issue arises with services that are not directly allocated to individuals such as fire and police protection, which arguably protect housing units and commercial properties in which families live and conduct business. Should the costs of such services be allocated proportionately to the number of households or to the number of individuals? All the studies reviewed here have used a per person allocation algorithm.

Costs to Individuals vs. Costs to Businesses

At the same time as the studies reviewed have excluded corporate tax payments from the revenue side, they have prorated the total costs of public services to individuals. For some services, such as fire and police protection, general government functions, even garbage collection, such an allocation is clearly questionable. Businesses benefit from the provision of those services and hence a portion of their costs should be allocated to them.

Average vs. Marginal Costs

What cost basis should be used in assigning costs for services that can be provided with minimal, if any, additional operational costs is a critical issue. Fixed costs—such as building and/or maintaining a facility, or administering a program—may not vary over a broad range of service recipients. But at some point, substantial incremental costs are required to build new facilities. Which approach to adopt in allocating such costs is both a technical and a political decision. A *marginal* cost approach is consistent with a focus on the "cash costs" of providing the service to an increased number of people. In selecting this approach, one should be prepared to attribute to immigrants the entire capital costs of building new facilities should these be necessitated by the growth in the population they generate. An *average* cost approach—total cost of service divided by total number of recipients—is consistent with a focus on "benefits" of the services, i.e., the immigrants benefit equally in the provision of the service. These marginal and average costs approaches provide different pieces of information to policymakers. The first measures the costs in added public funds to extend a service to a specified increment of the population. The second measures what everyone ought to be charged for the service were the burden of paying for the service distributed equitably according to the level of benefit received.

Employees vs. Employers

A final allocation issue arises when revenues are collected in some predetermined proportion from both employees and employers (such as payroll taxes for social security, unemployment compensation, and Medicare). This issue has been treated differently by different studies. Passel (1994) and Romero, et al., (1994) for instance, deemed that the entire employee and employer components of payroll taxes are revenues "contributed" by the employee. In effect, they assume that the employer portion of Social Security payments is passed through to the employee in the form of lower wages and/or benefits. Parker and Rea (1994) also deemed both the employee and employer portions of the payroll tax to the employee. However, because payroll tax payments made by employers are deductible for the purpose of computing corporate taxes, they deducted the implied "tax expenditure" amounting to about one third of the employer payments. They reasoned that the payroll taxes collected are partially offset by the "loss" in corporate taxes. CIS (1994), on the other hand, deemed only half of the employer portion of the payroll tax as revenue "contributed" by the immigrant employee. It relied on econometric findings that only about half of the payroll tax paid by the employer can be deemed as being actually paid by the employee in the form of a lower salary or benefits. The rest is passed on to consumers and/or absorbed by the employer in the form of lower profits (Ehrenberg & Smith, 1991).

Which of the above approaches is the "right" one in computing payroll revenues attributable to any subgroup of individuals in the labor force? Once again, the answer to this question is it depends. It depends in part upon the extent to which immigrants are substitute or complement to native-born workers and the extent to which immigration affects the wages and the incomes of the native-born, either positively or negatively. As noted earlier, the direction and size of these dynamic effects of immigration remain controversial.

RECASTING THE POLICY DEBATE

The short-term focus on fiscal costs of the current policy debate has overshadowed the economic, social, and cultural benefits of immigration documented in past studies. This is not surprising given current economic conditions and increases in immigration flows. A national recession that has been particularly severe and prolonged in the state with the largest concentration of immigrants—California—combined with widespread federal, state, and local government budget shortfalls, have focused public attention on the short-term effects that immigration has on the native-borns' standard of living and on state and local governments' ability to maintain public infrastructure and services at current levels.

These short-term concerns carry over into the longterm as well. There is a concern that increasing numbers of immigrants with low levels of education are inconsistent with the development of an economy that increasingly demands a more highly educated labor force. Similarly, there are concerns about the country's ability to strike a balance between continuing population growth and environmental "sustainability." In this instance, immigration, a major past and projected future contributor to population growth, is viewed as threatening that balance.

Studies of the fiscal costs of immigration, appropriately designed and supported by suitable data, have the potential to inform both longer- and shorter-term issues by contributing useful information to enable policymakers to decide:

- Which and how many immigrants should be allowed to enter the country?
- Which public services should be provided to immigrants and at what costs?
- Whether the federal government should reimburse state and local governments for the services they provide to immigrants and, if so, by how much?

We elaborate on these points below.

Criteria for Entry and Service Eligibility

The questions of which immigrants, how many immigrants, and which public services should be extended to them are interrelated. Policy in the former two areas has traditionally been driven by longterm economic, humanitarian, and social considerations. Including an explicit consideration of the public costs and benefits of immigrants would represent a real departure from past practice. To date, such costs have played a very minor role in policy with the exception of their inclusion among the factors used to set annual refugee quotas under the 1980 Refugee Act and an unevenly enforced proviso disqualifying immigrants who might become a public charge from permanent residence. The use of a fixed set of preference categories and a constant annual immigrant ceiling testifies to the fact that short-term fiscal cost factors were to be ignored in determining the number and characteristics of legal immigrants and the services they are eligible to receive.

If nothing else, the current policy debate has brought to the fore the issue of whether fiscal costs over the short and/or the longterm should become an explicit principle of the nation's immigration and refugee policies. Whether such a policy shift is desirable depends upon the political tradeoffs we may be willing to make among potentially competing objectives of immigration and other social policies, e.g., provide asylum to refugees, ensure equal treatment to residents, promote family unification.

To assess whether to consider fiscal costs in formulating immigration policy requires taking a long-term as well as short-term perspective. In essence, we need to know not just whether immigrants in the aggregate consume more than they contribute in any one year but what services they use and what revenues they contribute over the entire course of their lifetime. We also need to distinguish immigrants along those dimensions that are most relevant to their longterm economic success, and/or use of public services. Neither of these requirements has received any real attention in the studies reviewed.

Identifying the factors that lead to high/low use of public services and economic progress of immigrants over time requires a different analytical approach than that which has been used in current studies. It would require that considerable attention be given to the individual and family characteristics of immigrants at the time of their entry that play the most important role in determining their eventual success. Such characteristics would include, at a minimum, the criteria under which they qualified for entry, e.g. family reunification, humanitarian, or employment-related. But they should also include characteristics that might be considered in the future to determine eligibility for permanent entry such as: education levels, ability to speak English, skills and work experiences, income of family members already in the country, or other potential criteria.

Similarly, in looking at the specific services that immigrants use, one needs to look upon those services in much the same way one would at any investment: does the investment pay off over the longterm, i.e., are the costs of providing that service recovered over the life of the investment. Answers to this question would go a long way toward determining which services provided to immigrants pay off in terms of higher future revenues and which do not. This line of inquiry would provide more reliable and policy-relevant information than the current short-term and undifferentiated approach to estimating the public costs of immigration. In particular, it would inform the issue of whether to change current entry criteria and, if so, in what way. It would, also, provide information on which groups are high users of state and local services and assist in determining the level of federal assistance needed to cover these costs.

We are not suggesting that consideration of immigrants' effects on the public fisc should necessarily become a factor considered in determining which immigrants to admit. Indeed, several studies (e.g., Fix & Passel, 1994) indicate, for example, that refugees admitted on humanitarian grounds during the past 20 years, are far and away the highest users of some public services. The federal government has recognized the special services needs of refugees making them eligible for a host of services for which other immigrants are not eligible and assuming the responsibility for financing these services. Clearly, using a fiscal cost-benefit criteria as the basis for admitting refugees would conflict with the humanitarian objectives of U.S. refugee policy. Whether such tradeoffs are desirable is essentially a political question but the eventual implications of those tradeoffs should be examined in a longer-term analytical framework, not just in the short-term: Who would benefit and who would gain? Which immigrants from which countries might be excluded? What would it mean for enforcement? And so on.

Federal Transfer Payments

Whether the federal government ought to reimburse state and local governments for their costs of providing services to immigrants is not a question that can be answered exclusively on analytical grounds. This is an issue that goes to the heart of federal-state relationships and responsibilities and to the question of "unfunded" federal mandates. Elsewhere we have argued that because only the federal government can effectively intervene to control the number of immigrants entering the country, it should bear a greater share of the public costs of providing services to immigrants than it does currently (Vernez, 1993). A precedent for this practice was set in the Immigration and Reform Control Act of 1986, which authorized $1 billion per year for four years to reimburse state governments for the costs of providing public services to immigrants granted amnesty under IRCA. The funds authorized for these State Legalization Assistance Grants (SLIAG) were never fully appropriated due in part to the stringent eligibility verification and financial accounting procedures required prior to federal reimbursement (Liu, 1991). But, in the past few years, the states most affected by immigration—California, Florida, New York, Texas, and Illinois—have

TABLE 6

Federal and State and Local Governments' Revenues and Expenditures: 1993

	Total Revenues		Expenditures	
Level of Government	Dollars (Billions)	Percent	Dollars (Billions)	Percent
Federal	1,269.5	49.0	1,495.9	62.8[a]
State and local	881.1	41.0	886.2	37.2
Total	2,150.6	100.0	2,382.1	100.0

Source: U.S. Department of Commerce, Survey of Current Business, Volume 74, Number 6, June 1994, Tables 3.2 and 3.3.
[a]The difference between the $1,495.9 federal expenditures and the $1,269.5 revenues reflects the federal budget deficit. By the same token, state and local governments exhibited a small surplus.

again pressed for federal reimbursement, specifically for the costs of services provided to illegal immigrants.

Although several studies have attempted to estimate how much state and local jurisdictions spend on providing such services, our review suggests that none provides a reliable estimate of the magnitude of these costs for the reasons outlined in the prior sections. The U.S. General Accounting Office (GAO, 1994) reached a similar conclusion in its more limited review of three studies that attempted to estimate the costs of providing education, health, and correction services to illegal immigrants in California.

A principal argument that state and local governments have made for federal reimbursement is the fact that the federal government collects more tax revenues from immigrants than state and local governments taken together. Senator Barbara Boxer (CA) articulated this argument when she wrote to President Clinton that "because most revenues from immigrants accrue to the federal government . . . an appropriate use of these revenues would be to reimburse states and localities for uncovered costs."[5]

Table 6 indicates that the Federal government does indeed collect about 60% of all public revenues collected in taxes and from other sources. But it also spends more providing services—including transfer payments to state and localities—than all other levels of government. The issue then is not with the accuracy of the facts but rather with the assumption that all revenues collected by the federal government from immigrants

[5]Transmittal letter to the President of the United States dated November 29, 1994 sent with GAO (1994).

should be returned, in their entirety, to reimburse states and localities. (In all of the studies that we reviewed, the estimates of "uncovered" state and local costs exceed the estimated revenues illegal immigrants have paid to the federal government.)

Underlying this assumption are two implicit arguments. The first is that the federal government provides no services to illegal immigrants. This is factually wrong. While the marginal federal costs of extending coverage of such services as national defense, policymaking, general governmental administration may be small, this is not true for all services. The federal government pays at least half the costs of providing emergency health care, nutrition, AFDC, and a slew of other services provided by states and localities to both immigrants and the native-born.

Even if those costs are disregarded, the assumption that the federal government has no claim against revenues collected from undocumented or other immigrants must rest on the assumption that the costs of providing public goods to all residents should be solely born by native-born citizens. This would seem to violate basic equity principles.

RECOMMENDATIONS

Existing studies of the costs of immigration do not provide a reliable or accurate estimate of the net costs and benefits of immigration—even when those costs/benefits are defined narrowly. Moreover, without reaching consensus on a host of conceptual and accounting issues, we doubt that additional studies will shed light on these important policy questions. Consequently, we recommend the following:

First, the research and policy communities need to recognize that the available data are inadequate for making reliable estimates of the fiscal costs of immigration. Instead, of conducting more studies with these data, more emphasis should be placed on developing a commonly accepted framework for estimating these costs and collecting the data required for that framework. In addition, much more attention should be paid to the longer-term perspective of immigration and to its ability to speak to important policy questions.

Clearly, the issue of federal reimbursement for the unreimbursed state and local costs of providing services to illegal immigrants is a pressing one which cannot simply be ignored until all the necessary conceptual and data problems have been solved. However, this issue is also not amenable to a purely analytical answer. Should a political decision be made in favor of reimbursement, a common accounting framework will be required against which to measure the best range of estimates that currently exist. Such a framework could be developed by some sort of joint federal-state taskforce.

Second, if federal and state governments are indeed serious about answering the policy questions that are dominating the current immigration policy debate, then they will have to provide the resources to support that effort. Such an effort will require agreement on conceptual issues, a common accounting framework, data collection efforts, and attention not just to the short-term approach but also to the longer-term framework necessary to address the equally important policy issue of whether the goal of minimizing the public costs of immigration should be added to the list of objectives of US immigration and refugee policy. Barring such an investment, we are unlikely to make real progress on these issues.

Finally, however critical the issue of the fiscal costs of immigration might be currently, it should not overshadow that it is only one dimension of the broader question of the economic, social, cultural, and distributional costs and benefits of immigration.

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