Unmeasured, untaxed economic activity may be growing faster than the “regular” economy. If so, and if it was as large as 15 percent of national GNP by 1978, this “underground economy” could be significantly distorting the economic models used for forecasting. As a result, fiscal and monetary policy makers run the risk of thinking they are restricting the economy when they may actually be overstimulating it.

Because of the fascination and infatuation of the public and the economics profession with official statistics about the economy, we have had our heads set spinning with the numbers released over the past several months. Productivity growth has come to a halt, consumers have virtually stopped saving, and we are faced with horrendous inflation at a time when the unemployment rate is high by historical standards. Real growth creeps along, and our potential for growth seems increasingly limited. And yet despite all the negative news and the predictions of recession, the economy shows amazing resilience in the face of lower real incomes, high debt burdens, and rising taxes.

Why have so many highly skilled, well-intentioned students of the economy decided to modify their recession forecasts? Primarily because it is becoming increasingly obvious that the official statistics used in the economic analysis understate growth levels of output and income and overstate the degree of hardship due to unemployment. The reason for the distortion, many economists believe, is the existence of a large and evidently growing underground economy.

What is the Underground Economy?

The “underground economy” is economic activity that avoids official detection or measurement. Income from this activity is unreported, unmeasured, and
Persons engaged in producing illegal goods or services, such as bookmaking, smuggling, prostitution, illegal drugs, etc., earn incomes which must be hidden in order to prevent detection of the illegal activity. Crimes, such as robbery, fraud, or embezzlement, are essentially redistribute and do not add to total output.

Persons engaged in otherwise legal production of goods and services but who can in some way cover up part or all of their income and thereby reduce their taxes are also part of the underground economy. Restaurant owners who don’t ring up cash sales, the friends who help each other remodel their homes, the painter who paints for cash only and reports whatever income he thinks fit, and the mechanic who fixes his neighbor’s car for cash are all examples of underground economic activities.

The underground economy which is accounted for by illegal activity is, by admission of law enforcement officials, a growing sector. Whether the sector is growing faster than the measured economy is not provable. However, much of the activity provided by this sector is services whose demands increase as incomes rise. In that regard, it seems reasonable to argue that income earned from these illicit activities is growing faster than the overall economy.

The underground economy which is accounted for by production of legal goods and services but is done so that income is hidden is probably due to the desire to increase after-tax income. There may be instances of a person hiding income so that a spouse or other interested party would not know the full extent of that person’s income.

The income and product in the underground economy generated in the tax-avoiding sector are arguably growing faster than the overall economy. In the simplest economic terms, a person’s willingness to participate in the underground economy and thereby engage in the illegal act of under-reporting income is based on his perceptions of the benefits and costs of such an act. When the benefits in terms of after-tax income gained from not reporting income are greater than the costs, then the temptation to underreport income becomes stronger.

The Benefits and Costs of Participating

The benefits are obvious—a higher standard of living with no increase in work effort or considerable gains in wealth can be achieved by more work effort when the tax rate is zero on the income thus earned. The benefits of underpaying taxes will grow relative to income as the tax rate increases. The cost of underpaying taxes is the probability of being caught and convicted multiplied by the punishment for violating the tax laws. Since much of the cost of being caught is the shame and embarrassment of the arrest and trial, that cost is virtually independent of the amount of tax underpayment. As a result, an increase in tax rates as income rises will increase benefits much faster than costs.

Another element that has contributed to an increase in the benefits of underpaying taxes relative to the costs has been a lowering of the public’s assessment of the benefits it derives from government spending. This is particularly true in the area of transfer payments (subsidies, aid to the needy, etc.).

Government spending for national security, public safety, public health, and, to a lesser degree, education is almost universally accepted. When a large share of tax dollars is used for transfer payments, the degree of taxpayer support dwindles. Because individuals perceive a smaller benefit from growing government spending, their willingness to pay taxes is further reduced.

Evidence of the growing incentive to cheat the tax collector is abundant. In 1950, 25 percent of personal income minus transfer payments went to pay income taxes, sales taxes, etc. By 1960,
that figure was 33 percent; in 1970, 41 percent. As of 1979, taxes paid by individuals amounted to 45 percent of personal income minus transfer payments. Granted transfer payments recipients do pay some taxes, however, the rise from 25 to 45 percent has been borne mainly by persons who receive no financial assistance from the government. Although not as much as in Great Britain or Sweden, the U.S. taxpayer is increasingly saddled with higher tax rates.

Because it is nearly impossible to avoid property taxes and because not all citizens are property owners, most people who avoid taxes do so primarily by not reporting income. Sales taxes can be avoided, but probably to a much lesser extent, in terms of the total dollars involved than income taxes.

**How Do We Know It's There?**

Economic theory very clearly suggests the existence of a growing underground economy. What evidence do we have to support the contention? The fact that participants in the underground are trying to escape detection means that measuring income and product will be extremely difficult and frustrating. Nonetheless, several attempts have been made and other work continues toward that end.

The IRS has made a “direct” estimation of unreported income in 1976 through the use of results obtained on the Taxpayer Compliance Audits, which are far more thorough than the normal audit. Their results indicate that unreported income in 1976 was between $100 and $135 billion, or about 10 percent of measured personal income that year.

The IRS admits, however, that their more rigorous audit cannot track down income for which there are no records kept. Nor is there any good way to estimate the income of nonfilers. Their limited data also did not permit any strong conclusions about trends in noncompliance.

Several writers have tried to estimate the size of the underground economy through indirect means. The first widely publicized attempt by Peter Gutmann was based on certain assumptions about the growth in the use of currency. Gutmann argues that the rapid increase in the amount of currency in circulation relative to the amount of money in checking accounts is indicative of increased use of underground transactions. Gutmann’s estimate for 1976 put unmeasured output and income close to 11 percent of measured output.

Continued rapid growth of currency relative to demand deposits since 1976 would make the 1980 underground larger than 11 percent of the measured economy under Gutmann’s assumptions. Edgar Feige obtains estimates of total currency and checking account transactions in the economy and, by making certain assumptions regarding the growth in checking account transactions for purely financial purposes, estimates the size of the underground economy. Feige asserts that the unmeasured output in 1976 was as high as 19 percent of total output and, by 1978, was up to 27 percent of total output. His procedure would predict further growth in 1979.

Using a more conservative procedure than Feige, we have estimated that the underground economy grew from 9 percent of reported GNP in 1970 to at least 15 percent of GNP in 1978 (see Appendix). Our procedure assumes that all underground activities are done with cash; Feige does not. None of the estimates mentioned attempts to estimate the role of increased use of barter.

If the underground economy were an unchanging proportion of GNP, we

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Estimated unreported activity grew much faster than reported GNP.

Estimated unreported
88.4
1970
391.1 bil.$
1978
+442%

Reported
1078.8
1970
2446.7 bil.$
1978
+227%

would not need to be terribly concerned with it because it would not distort relationships between important aggregate economic variables (output, income, spending, etc.) over time.

Because our estimates and others show the underground economy to be growing relative to the regular or measured economy, we would expect changes in the measured variables (GNP, income, and employment) to be smaller than the true changes. The effects of the unmeasured forces, then, are expanding.

**Effects of the Underground Economy on the Regular Economy**

What important effects does the underground economy have on the regular economy, and what are the implications for economic policy?

First, a large and rapidly growing underground economy means that actual income and employment are larger than official statistics show and that resources are more fully utilized than unemployment rates indicate.

Second, because tax is avoided in the underground economy, initially, a lower price will be established for goods and services produced in the underground economy, drawing activity away from the regular economy, a shift unintended by policymakers and perhaps detrimental to long-run economic growth.

Third, those who produce in both the regular and underground economy are likely to be relatively more efficient in their underground pursuit because the after-tax reward is higher per hour of work effort. This would imply that productivity might be higher in an underground industry than in the same field in the regular economy.

Fourth, the fact that a much larger volume of final transactions is being carried out than the GNP figures show means that the estimates of money velocity and velocity increases are too low.

Fifth, a disproportionate share of the tax burden is borne by those who are not engaged in the underground economy.

Sixth, if the share of unmeasured income going to investment or net exports is increasing, it would mean a rise in the savings rate in the unmeasured economy. In turn, this would be consistent with a decline in the measured savings rate while the true overall savings rate was unchanged or fell less than the published figure.

Seventh, because there is no price index for unmeasured activity, we cannot be sure what the inflation rate is in that sector. If the inflation rate is lower in the underground economy, then the rates of inflation reported for the measured economy would substantially overstate real earnings losses.

Finally, all of this suggests that the economic models used for forecasting may well be technically and theoretically deficient.

**Policy Implications**

These developments clearly have substantial implications for economic policy. To the extent that fiscal and monetary policy is expected to reduce unemployment and raise living standards in the long run, those policies could be massively overstimulative if measured income

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*Because money velocity (the average number of times a given monetary unit is spent during a given time period) is based partly on the total amount of spending activity.*
and employment are understating the true levels. If growth is measured low, in other words, economic policies are likely to be aimed too high—in pursuit of growth which is thought to be missing but is merely unmeasured. Stimulation of aggregate demand would then worsen inflation at a time when resources are, for all practical purposes, fully employed. Monetary policy might also be deluded into maintaining an overstimulative stance. The setting of money growth rate targets is based on certain assumptions about the way money growth and nominal GNP growth are related. These assumptions are based largely on past performance. A rapid growth in the underground economy would mean that a given rate of money growth is supporting a much larger growth in activity than the monetary policymakers believe. In other words, money growth which policymakers would view as slow enough to restrain growth could, in fact, not be restrictive at all.

What can be done? In the absence of hard data for the underground economy, it would be difficult to try to take it into account precisely in policy formulation. It may be that monetary and fiscal policy will have to focus more on prices and interest rates directly, since data on income, output, and spending have become less reliable.

APPENDIX

In order to estimate the underground economic activity, we start with the assumption that all underground activity uses cash. We then obtain turnover rates for currency, using the Feige assumption that each unit of currency is used, on average, 125 times before it has to be destroyed because it is unfit for circulation. The annual turnover rate is estimated by dividing the average length of the life of currency into 125 to get the number of transactions per bill annually. We then multiply the turnover rate by the outstanding currency in each denomination to obtain the value of total currency transactions.

From 1950 to 1965, the ratio of currency to GNP fell at a rate of 2.9 percent per year. After 1965, the rate of decline was 0.9 percent per year. The decline in currency per dollar of GNP in the 1950s was due to several factors, including growth in the use of demand deposits by consumers. However, with the massive growth in charge cards and other technological advancements, one would expect that the need for currency would continue to decline relative to GNP, at least at the 1950-65 rate.

To estimate illicit transactions involving currency, we calculate the excess of currency in years after 1965 by assuming that without illicit demands for currency, the ratio of currency to GNP would have continued to fall at 2.9 percent annually. The transactions carried out through the use of the excess currency are assumed to be underground activity.

This procedure is very conservative in that it puts underground activities at zero in 1965, which is very doubtful. But our purpose in this article is to show the trend of underground economic growth, so we are not concerned with the absolute levels per se. Using more liberal assumptions, we would get higher levels and faster growth rates.

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