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THE SUSTAINABILITY OF ECONOMIC RECOVERY IN THE UNITED STATES

The Risks to Consumption and Investment

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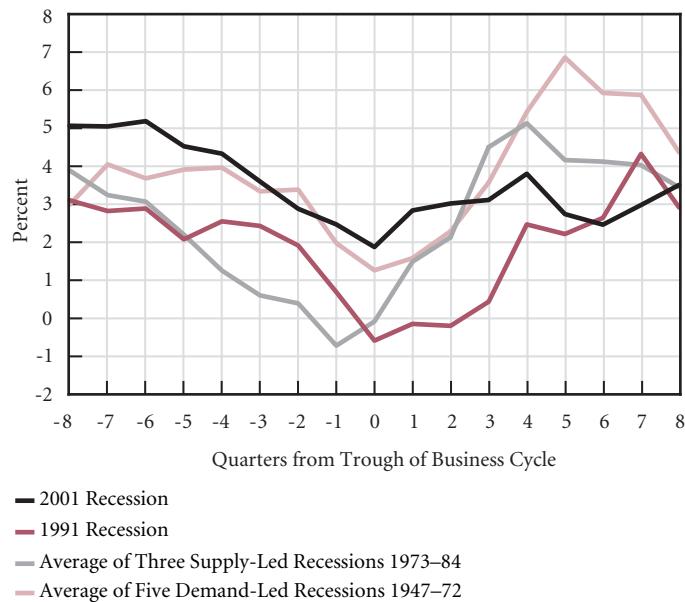
The current anemic economic recovery in the United States stems from weak investment, owing to excess capacity created during the “New Economy” bubble in the second half of the 1990s. In the aftermath of the bubble’s bursting, the consumer has been on a tightrope, as losses in equity markets have been partly offset by gains in real estate and as fiscal support and mortgage refinancing have been partly offset by consumer cautiousness.

Imbalances in the corporate sector, which take time for correction, are preventing investment from picking up and laying the foundation for a new long-lasting economic expansion. Meanwhile, the fragile consumer might contribute to a deep and protracted recession if the economy stumbled in light of risks, such as a jobless recovery and a growing personal-sector imbalance that is fueled by a property bubble. Tax reductions may create a cyclical upturn in the U.S. economy in the short run, but this kind of government policy is unsustainable in the long run.

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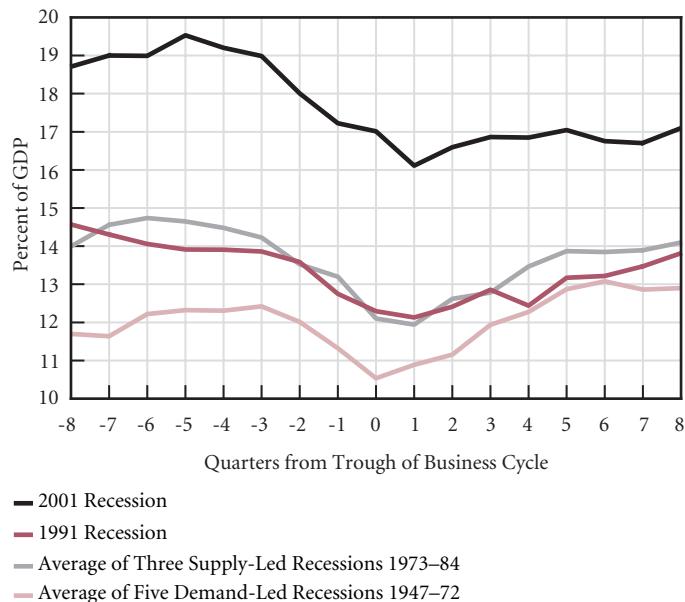
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Figure 1 Consumption



Source: Authors' calculations

Figure 2 Investment



Source: Authors' calculations

Recent Behavior of Consumption and Investment

Figure 1 shows the pattern of real consumer expenditures for eight quarters before and after the trough of recession. To simplify comparisons, four lines are shown: the average of five demand-led recessions in the 1947–72 period; the average of three supply-led recessions in the 1973–84 period; the 1991 recession; and the 2001 recession. Consumption during the 2001 recession fared better than during any other business cycle, decelerating from an annual rate of 5.1 percent to 1.8 percent before resuming higher growth. A rebound of consumption in the second half of 2003, coupled with rising consumer confidence, raised hopes that the economic recovery was on a sustainable path.

Figure 2 shows the behavior of investment before and after the trough of recession. The fall in investment in the 2001 recession—3.4 percent of GDP—was the steepest of all recessions. Moreover, investment grew just 1 percent of GDP in the first two years after the trough, thereby making the recovery from the 2001 recession the weakest of all recessions.

The causes of the anemic recovery are the balance-sheet problems of the business and personal sectors (because of prior budget surpluses). In the last two quarters of 2003, however, investment growth accelerated, thereby raising hopes that the recovery was sustainable. There are downside risks to this expectation, however, which we explore below (Arestis and Karakitsos 2003a, 2003b).

Short-Run Factors Affecting Consumption and Investment

Short-run factors are those that affect the economy over the next 12 months.

A. Consumption

The most important determinant of consumption is real disposable income, which is equal to personal income less taxes and adjusted for inflation in consumer prices. Although personal income grew only 2.4 percent in the first year of recovery (November 2001 to November 2002), disposable personal income grew 7.3 percent. The wide gap, which has since narrowed to less than 1 percent, was due to the fiscal support of the personal sector. Taxes as a percent of disposable income declined from a peak of 18.3 percent in March 2001 to 12.6 percent in October 2003 (Arestis and Karakitsos 2004). During a second

round of retrenchment by the corporate sector, the growth rate of real disposable income was more than halved—from 5.7 percent in November 2002 to 2.4 percent in April 2003—but it accelerated in the second half of 2003, thanks to new tax cuts.

In the current cycle, weekly hours of work were cut, on average, 1.5 hours—a pattern not dissimilar to previous cycles. However, average weekly hours have increased merely 0.7 hours during the early stages of the current recovery, which is the slowest pace of all cycles.

Job losses have been more pronounced than in other cycles. Job creation peaked 19 months before the trough at 305,000 new jobs per month and bottomed two months after the trough at 234,000 job losses per month, which was the steepest decline in the last 10 business cycles. Moreover, job creation in the recovery phase has been anemic and, even worse, job losses resumed and average weekly hours of work were cut during the second round of retrenchment in spite of higher profits and balance sheet improvements. Companies managed, for the first time, to reduce the earnings of the labor force as a result of flexible labor markets introduced in the late 1980s and early 1990s.

The current cycle's picture changed markedly in the second half of 2003. Retrenchment was successful in restoring profitability and improving balance sheets, so wages began to rise, job creation resumed (albeit sluggishly), and average weekly hours increased. The last round of tax cuts in 2003 also bolstered real disposable income and will likely boost consumption. Therefore, all the short-run factors affecting consumption have improved, and any risks to consumption will come from long-run factors.

B. Investment

Investment must improve before the recovery is sustainable. This implies a recovery in profits and capacity utilization. Unit profits peaked just two quarters after the trough and subsequently decelerated for a year, as the effect of one-off incentives faded away. Profits rebounded strongly in the last two quarters of 2003, but part of the rebound has been caused by depreciation incentives in the 2003 fiscal package (a one-off factor). The decline of the dollar and accommodative fiscal and monetary policy has also improved the outlook for profits.

In a typical cycle, production resumes after excess inventories are liquidated. Hence industrial production is a lagging indicator of the trough of the business cycle by one or two

months. In the 2001 recession it bottomed two months after the trough, and the recovery fizzled after the first year. During the second round of retrenchment (November 2002 to April 2003), production cuts led to a double-dip recession in manufacturing, but a reduction in unit labor costs, the restoration of profits, and lean inventories paved the way for a growth in production. In the period from May to December 2003, capacity utilization rose to 74.5 percent from 72.6 percent, thereby raising hopes that excess capacity might be absorbed if demand continued at a high rate.

Overall, investment was lackluster during 2002 and the first half of 2003, and played a significant role in an anemic recovery. Because investment improved in the last two quarters of 2003, however, our analysis suggests a change in trend, as all short-run factors that affect investment have improved.

Long-Run Factors Affecting Consumption and Investment

A. Consumption

The outlook for the savings ratio over the next two years will determine the fate of the latest tax cuts and the income boost from higher employment in stimulating consumption. In a leveraged economy, the savings ratio moves countercyclically: i.e., it falls in a boom and rises in a recession. The factors that determine the savings ratio are net wealth and the degree of uncertainty about job security and income growth (Frowen and Karakitsos 1996).

When equity prices declined during the period from March 2000 to March 2003, net wealth subsequently fell toward its long-term average (480 percent of disposable income), while the savings ratio increased to 4 percent. Between the peak of the bubble (March 2000) and the trough of the business cycle (September 2001), financial assets fell \$6.8 trillion, while rising property prices boosted the value of tangible assets by \$3.3 trillion. Thus the erosion of gross wealth was limited to \$3.5 trillion. The latest figures from the third quarter of 2003 show that the picture has changed, as losses in financial assets narrowed to \$3.6 trillion, while tangible assets soared to \$4.6 trillion. Gross wealth is now \$1 trillion higher than it was at the peak of the bubble. This is impressive, and could lead one to conclude that consumption is no longer a problem. What matters, though, is net wealth, rather than gross wealth, and net wealth has not recovered.

Real estate as a percentage of disposable income is at an all-time high (191 percent). Unfortunately, the property boom was financed by debt accumulation, which reached 110 percent of disposable income by the third quarter of 2003. Since the peak of the equity bubble, debt has increased \$2.5 trillion, so the \$1-trillion gain in gross wealth becomes a \$1.5-trillion loss in net wealth.

Job security and income growth depend on the outlook of the corporate sector. The fiscal package newly proposed by the U.S. government is controversial because it is intended to be tight, but it may turn easy when it becomes law. The Bush administration has called for permanent tax cuts that are financed by spending cuts, yet is unlikely to veto increased expenditures in an election year. Although another fiscal boost would ensure that investment is booming at the time of the presidential election, higher long-term interest rates could weaken investment in 2005 and threaten the property-market boom. Furthermore, if an economic boom in 2004 leads to strong job creation, then the growth in corporate profits will decline. These factors could affect consumer confidence in 2005. Combined with household debt service costs that are at an all-time high, the savings ratio would rise along with the degree of uncertainty about net wealth, job security, and income growth.

B. Investment

High debt levels require expensive servicing and large volumes of new debt issues to replenish maturing debt. In the recent downturn, debt levels rose during the recovery phase, a trend that has since reversed in light of the dramatic drop in the last two quarters of 2003 (3.5 percent of GDP) in response to the growth rate exceeding the rate of debt accumulation. Debt reduction indicates that corporate-balance-sheet restructuring and government deficit spending are working, which bodes well for a recovery of investment. However, the net worth of the corporate sector fell 2.4 percent of GDP in the last two quarters of 2003, a trend that signaled that successful restructuring was not yet over.

Retrenchment depends on the ease of refinancing the stock of debt, and the service burden is based on profits and net cash flow. In the recent downturn, companies switched into long-term debt earlier than they had before, and the switch amounted to almost 11 percent of total debt. The benefit of switching, however, depends on the relative cost of finance

between capital markets and banks, and this benefit has quickly disappeared in the current business cycle. In the first year of the recovery, high-grade companies found it more expensive to borrow from capital markets than from banks. Hence the switch to long-term debt became a hindrance in recovery. The situation improved marginally in the second year of recovery, but the risk of rising spreads because of burgeoning budget deficits does not bode well for future investment.

Overall, the long-run analysis suggests that debt levels and leverage in the latest downturn are higher than in previous recessions, but debt levels are declining as a result of brisk economic growth, and interest rates are lower than during other business cycles. Debt-service costs are the lowest in 30 years, and credit risk has abated somewhat. The long-run factors affecting investment improved dramatically in the second half of 2003, paving the way for a sustained recovery in investment.

The Consumption Model

In the short run, consumption depends on real disposable income, the savings ratio, and the rate of interest. The wealth effect is very important in this theoretical framework, and has long-lasting effects. Higher unemployment or a decline in consumer confidence increases uncertainty regarding job security and income growth, which raises the savings ratio and lowers consumption. An increase in the interest rate also lowers consumption if the substitution effect is higher than the income effect.

Shocks to the income spiral are introduced by monetary policy through changes in interest rates, by fiscal policy through taxes and subsidies, and by the corporate sector through wages, employment, and consumer price index (CPI) inflation. The increase in consumption from a shock is not explosive, as the income-consumption loop is stable. The stability is ensured if the extra boost to consumption from a small increase in disposable income (the marginal propensity to consume) and net wealth is less than one. Every subsequent round of higher real disposable income and net wealth would stimulate additional consumption, so that consumption, income, savings, and wealth in the new long-run equilibrium are higher than in the initial equilibrium.

The Investment Model

It is clear that financial factors are crucial determinants of investment, and that investment depends on six variables: four short-run variables (capacity utilization, industrial production, corporate profits, and interest rates) and two long-run variables (debt-to-investment ratio and, in the corporate sector, net-worth-to-GDP ratio). In our modeling strategy, Keynes's "animal spirits" and "uncertainty of expectations" hypotheses critically influence investment, but the relationships work, basically, through industrial production and profitability variables that are crucial in determining gross investment and capacity utilization.

Shocks to the investment spiral are introduced by monetary policy through changes in interest rates and fiscal policy; by direct measures, such as depreciation incentives on investment; or by indirect measures that influence demand, such as changes in tax rates and government expenditures. If the shock arises from a change in monetary policy, it will increase demand and reduce the cost of capital that stimulates investment directly. If the shock stems from personal-sector tax cuts or from increases in government expenditures, demand is also stimulated and the effect could be permanent (e.g., if deficit spending is sustained). If the shock consists of depreciation incentives, like those that were implemented in 2001 and 2003, the effect on investment is direct and timely.

The Long-Term Risks to Consumption and Investment

To assess the long-term risks to consumption, we simultaneously simulated our consumption model and our wage-price and house-price models. To assess the long-term risks to investment, we conducted a number of simulations using our investment, profits, and wage-price models; and our model of existing and expected business intentions based on surveys conducted by the Institute of Supply Management (*see* *Arestis and Karakitsos 2004* for full details).

The models were simulated under two alternative scenarios:

- Scenario I (weak recovery in 2004): What would happen to consumption and investment if the current recovery faltered in 2004 and once again became anemic?
- Scenario II (strong recovery in 2004): What would happen to consumption and investment if the recovery that started after the Iraq war remained strong throughout 2004?

A. Underlying Assumptions Affecting Consumption

1. *Scenario I (Weak Recovery in 2004)*

The essence of this scenario lies in the assumption that the economic strength of the second and third quarters of 2003 resulted from one-off factors related to the fiscal package of the current administration (strong consumption owing to income tax cuts and the last-wagon effect of companies taking advantage of depreciation incentives on new structures) and improving confidence because of lower geopolitical risk. We expect the accommodative stance of fiscal and monetary policy to continue to support the economic recovery, but sector imbalances and the dissipation of one-off factors will cause the recovery to falter during 2004.

The fiscal burden (taxes less subsidies) diminishes gradually throughout the period, the pace of job creation is strong (approximately 170,000 new jobs per month), and wage inflation continues to decline in 2004. This trend reverses in 2005 as inflation picks up and excess labor demand puts upward pressure on wages. Real disposable income growth decelerates after August 2004, however, as the effect of previous tax cuts unwinds. While net wealth of the personal sector increases in 2004, it declines in 2005. The rate of growth of consumer confidence peaks in the spring of 2004 and falls thereafter, while unemployment remains steady. Under these assumptions, consumption peaks early in 2004 and decelerates to the end of 2005, but it is still growing at 3 percent by the end of 2004 and will help the current administration in the forthcoming presidential election.

2. *Scenario II (Strong Recovery in 2004)*

The essence of this scenario lies in the premise that a combined fiscal and monetary stimulus lasts at least one year (probably 18 months) before tapering off. The accommodative stance of monetary policy prevents long-term interest rates from rising and prolongs the effects of the fiscal stimulus. If long-term interest rates continue to rise, which is very likely, the stimulus from fiscal policy will peter out. This means that the growth rate of industrial production, which averages 4.6 percent in 2004, falls to 1.4 percent in 2005, but the average growth rate over the 2004–2005 period is the same as Scenario I (3 percent). Paradoxically, the higher growth rate in 2004 implies that the Fed could afford to wait until after the presidential election before tightening monetary policy.

Scenario I implies low growth volatility and high inflation volatility, whereas Scenario II implies high growth volatility and low inflation volatility. High growth volatility would cause high volatility in real disposable income growth, gross and net wealth, and consumption. As a result of our expected developments in real disposable income, unemployment, consumer confidence, and interest rates, consumption in Scenario II is relatively stronger than in Scenario I in 2004, but falls precipitously and drags the economy into recession toward the end of 2005.

B. Underlying Assumptions Affecting Investment

The four models used to simultaneously simulate the effects on investment incorporated the following assumptions: (1) corporate debt and net worth remain unchanged from the third quarter of 2003; (2) there is no further news on economic fundamentals, so the purchasing manager's index, based on a survey of business intentions, follows its own momentum, peaking at the beginning of 2004 and returning to equilibrium by the end of 2005; (3) industrial production continues to gather steam, and its growth rate peaks at almost 10 percent in October 2004, but the rate decelerates thereafter, reaching zero by the end of 2005; (4) profits decline throughout the period; (5) investment accelerates in the first quarter to 9 percent, but decelerates to almost 7 percent by the end of 2004 and to less than 2 percent by the end of 2005; and (6) capacity utilization climbs throughout 2004 and peaks at 80 percent before declining moderately in 2005.

1. Scenario I (Weak Recovery in 2004)

We expect the Fed to tighten monetary policy in the second quarter of 2004, with the prime lending rate climbing to 4.5 percent from 4 percent. The debt-to-investment ratio falls slightly and balance-sheet restructuring, along with declining profitability, erodes the net worth of the corporate sector. Profits decelerate rapidly to -6.2 percent by the end of 2005. Investment peaks in the first quarter of 2004 and decelerates rapidly to a meager 1-percent rate before recovering. Capacity utilization continues to recover throughout the two-year period.

The conclusion of this simulation is that investment is near its peak, as the buoyant rate of the past six months resulted from one-off factors. Economic fundamentals deteriorate in 2004, as the Fed likely tightens monetary policy, profitability declines, and the corporate sector continues to

restructure its balance sheets. Part of the reason for the risk to investment lies in the assumption of falling profitability owing to robust job creation.

2. Scenario II (Strong Recovery in 2004)

With strong economic recovery in 2004, the prime lending rate remains at 4 percent before rising to 5 percent in 2005. Corporate profits fall less drastically in 2004, but more precipitously in 2005 than in Scenario I. Strong economic growth induces companies to expand borrowing in 2004 but reduce borrowing in 2005. The volatility of the debt-to-investment ratio is assumed to be higher than in Scenario I. The net worth of the corporate sector remains unchanged in 2004 but improves in 2005. Capacity utilization rises to a higher rate in 2004 before converging to the rate in Scenario I by the end of 2005. The overall effect of these factors is strong, as investment grows throughout 2004 (9 percent by the end of the year), but with some volatility. However, investment decelerates rapidly in 2005 and falls below the investment level in Scenario I.

The overall conclusion of the rapid-growth scenario is that investment remains very strong in 2004 but falls precipitously in 2005. Economic fundamentals are relatively better in 2004 but worse in 2005, which explains the stark difference in the risk to investment between the two scenarios.

Conclusion

All the short-run and long-run factors affecting consumption and investment have improved, paving the way for a sustained economic recovery in the United States. However, net wealth, which matters in terms of consumption, is still 3.5 percent (\$1.5 trillion) lower than at the peak of the equity market in March 2000 because the property boom was financed by debt accumulation, which is at an all-time high. Moreover, there is a risk to consumption if economic growth in 2004 turns out to be very strong as a result of a further boost from procyclical fiscal policy.

Investment would soften in 2005 because of higher long-term interest rates, and profitability would decline as a result of strong job creation in 2004. The worsening outlook for the corporate sector may raise the savings ratio and adversely affect consumption, while higher long-term interest rates may lower housing and financial asset prices. Furthermore, a strong economy at the end of 2004 would provide an incentive

for the government to tighten fiscal policy and curb the budget deficit in a postelection year. If that happened, then a slowing economy combined with tight fiscal policy would result in another recession.

The current accommodating stance of fiscal and monetary policy is probably sufficient for the economy to be booming at the time of the presidential election in November 2004. The long-term hazard is that the current U.S. administration would not risk an economy growing only at potential output by the end of 2004 and is therefore considering an additional fiscal package to stimulate the economy before the election. This would raise the risk of even higher long-term interest rates and foster forces that would ultimately weaken investment in 2005 and beyond.

Our main conclusion is that slow growth in 2004 is better than rapid growth, as growth at potential output would keep a cap on long-term interest rates and would not jeopardize investment, the housing market, and economic growth in 2005.

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