THE HAMILTON PROJECT

Advancing Opportunity, Prosperity and Growth

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Jeffrey R. Kling

Fundamental Restructuring of Unemployment Insurance:

Wage-Loss Insurance and Temporary Earnings Replacement Accounts

The Brookings Institution

The Hamilton Project seeks to advance America's promise of opportunity, prosperity, and growth. The Project's economic strategy reflects a judgment that long-term prosperity is best achieved by making economic growth broad-based, by enhancing individual economic security, and by embracing a role for effective government in making needed public investments. Our strategy—strikingly different from the theories driving current economic policy—calls for fiscal discipline and for increased public investment in key growth-enhancing areas. The Project will put forward innovative policy ideas from leading economic thinkers throughout the United States—ideas based on experience and evidence, not ideology and doctrine—to introduce new, sometimes controversial, policy options into the national debate with the goal of improving our country's economic policy.

The Project is named after Alexander Hamilton, the nation's first treasury secretary, who laid the foundation for the modern American economy. Consistent with the guiding principles of the Project, Hamilton stood for sound fiscal policy, believed that broad-based opportunity for advancement would drive American economic growth, and recognized that "prudent aids and encouragements on the part of government" are necessary to enhance and guide market forces.

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This discussion paper is a proposal from the author. As emphasized in The Hamilton Project's original strategy paper, the Project is designed in part to provide a forum for leading thinkers across the nation to put forward innovative and potentially important economic policy ideas that share the Project's broad goals of promoting economic growth, broad-based participation in growth, and economic security. Authors are invited to express their own ideas in discussion papers, whether or not the Project's staff or advisory council agree with the specific proposals. This discussion paper is offered in that spirit.

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Abstract

This paper describes a revenue-neutral proposal to fundamentally restructure the system of social insurance after job loss in order to improve the protection against long-term effects of involuntary unemployment, provide a more progressive allocation of benefits, reduce incentives for firms to lay off workers, and encourage reemployment.

As part of this reform, the government would create a program of wage-loss insurance for reemployed workers that would augment the hourly wages of individuals who take jobs that pay a lower wage than was paid at their previous jobs. The reform proposal could reduce by half the share of laid-off workers who experience very large drops in wages at new jobs—from 14 percent to 7 percent.

In order to encourage return to work and to shift assistance toward those taking new jobs at lower wages (and away from those with new jobs at higher wages), traditional unemployment insurance payments would be replaced by withdrawals from temporary earnings replacement accounts (TERAs). As a complement to wage-loss insurance, TERAs would be structured to provide workers with the same ability to maintain living standards during unemployment as does the current UI system, while providing a mechanism through which workers could accumulate savings prior to unemployment and could borrow against future earnings if they subsequently exhaust those savings. One-third of revenues that are contributed to the current UI system would be used for TERA withdrawals for those with very low wages and those who do not return to work after job loss. Revenues reimbursing these withdrawals would come from a more progressive payroll tax. Two-thirds of revenues that are contributed to the current UI system would be used for wage-loss insurance. Revenues for wage-loss insurance would be paid by firms based on the use of the system by their former employees. The proposal could be implemented by one or more states, or nationally.

The core principle of this reform is that smaller, short-term needs can be met through savings, borrowing, and repayment, so that the funds for insurance can be targeted to assist those facing larger, long-term losses. The proposed system would shift assistance toward workers experiencing significant long-term wage losses following reemployment, in comparison to the current UI system's focus, which is solely on short-term cash transfers to workers experiencing bouts of unemployment. The proposed system would provide equivalent access to funds needed to maintain living standards after job loss, and a significantly greater share of net program benefits to workers in the lower half of the income distribution when compared to the current system of UI benefits alone. This new system would also reduce unemployment by discouraging temporary layoffs and by creating stronger incentives for the worker to find another job quickly, and thus enhance economic growth.

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I. Introduction

The churning U.S. labor market both creates and destroys jobs as part of a vibrant process through which the economy responds to inventions, changes in production technology, global and domestic competition, and shifts of consumer demand. Employers created 57 million jobs during 2005, and 54 million jobs ended. Of the jobs that ended, 37 percent—20 million—were involuntary job losses initiated by the employer (U.S. Department of Labor 2006a). On an average day in 2005, 3.7 million people who had involuntarily lost their jobs were actively seeking work, including 2 million who were permanently displaced due to plant closings or adverse business conditions (U.S. Department of Labor 2006c).

Permanent layoffs often cause both immediate income loss and lower wages when the worker is reemployed elsewhere. During the first six months after permanent involuntary displacement from a job, workers were out of work for an average of 15 weeks. In those weeks, they lost an average of $11,400 they would have earned at their previous jobs. After returning to work, many had substantially lower wages a year and a half after displacement. One-fourth of these workers had wages that were at least 25 percent lower than on their previous job. For workers with longer tenure, the losses were larger. Among workers with at least three years of tenure on their previous job, one-third had wage losses of 25 percent or more (above data from author's calculations, based on Displaced Worker Survey data for 2002). The average earnings losses five years after job loss among workers with six or more years of tenure have been estimated at 25 percent (Jacobson et al. 1993), with some individuals having losses much larger than that average.

Involuntary job loss can also have long-term implications for families. Children whose fathers were laid off when their employers' firms closed grow up to have annual earnings about 9 percent lower than similar children whose fathers were not permanently displaced from jobs, with effects about twice as large for families in the lowest quarter of the income distribution (Oreopoulos et al. 2005). Providing assistance to those experiencing such losses while encouraging work is critical for both fairness and economic growth—in part to avoid a backlash against a dynamic job market that facilitates overall gains in national income.

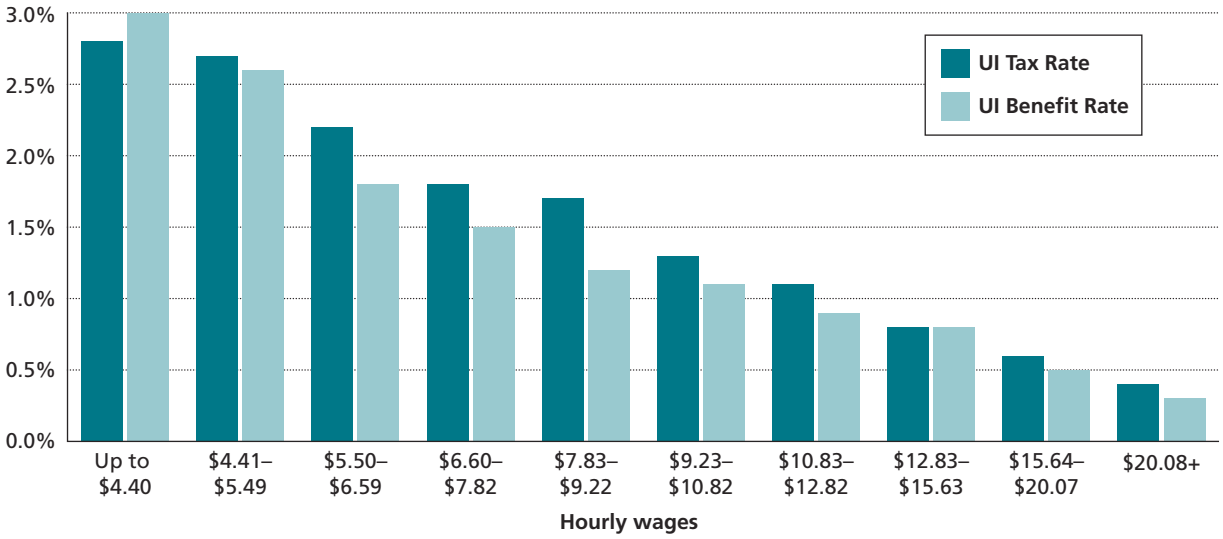
TABLE 1
Unemployment Insurance Statistics, 2005

Covered employment[a]	129,945,209
New beneficiaries[b]	7,917,294
Average weeks of duration[c]	15.3
Average weekly benefits[d]	$258
Benefits paid[e]	$31.2 billion

Source: Author's calculations based on U.S. Department of Labor 2006d.
Note: Statistics are for the calendar year 2005 (not the fiscal year).
a Covered employment is the number of employees covered by UI, averaged over 12 months.
b New beneficiaries are the number of first unemployment insurance checks issued to claimants during their benefit year.
c Average weeks of duration are the total number of state and federal benefit weeks per number of new beneficiaries.
d Average weekly benefits are total benefits paid divided by total weeks paid for all federal and state programs.
e Benefits paid are for all federal and state programs.

The principal form of insurance against job loss in the United States is the Federal-State Unemployment Compensation program, commonly known as unemployment insurance (UI). In 2005, 7.9 million Americans initiated UI receipt, with the average benefit amounts and duration given in Table 1. UI cushions the shock of job loss by providing approximately 50 percent of previous weekly earnings for up to six months after involuntary job loss to individuals who qualify. The payroll tax financing this system, however, is quite regressive. This might be fitting if the UI program were viewed strictly as insurance, because the payroll tax and the associated UI benefits are roughly proportional for all but the lowest-wage group of workers (see Figure 1). As a mechanism to help families cope with the effects of unemployment, however, the UI program is less well targeted: Higher-wage individuals and those with savings or other assets experience much less of a drop in their standard of living in the six months after job loss than do lower-wage individuals and those with less wealth (Browning and Crossley 2001).

FIGURE 1
UI Tax and Benefit Rates by Wage Level



Source: Anderson and Meyer 2006.
Note: Tax and benefit rates based on ratios of total taxes and total benefits to total labor income for each wage decile from the 1994 Survey on Income and Program Participation.

This paper outlines a proposal to restructure fundamentally the current UI system in order to redirect existing resources toward helping those who suffer wages losses on reemployment and to increase the system's progressiveness and efficiency. The reform uses a combination of wage-loss insurance and temporary earnings replacement accounts (TERAs).

Wage-loss insurance would provide income support to job losers who are reemployed at lower wages by providing a supplement that increases the value of each hour worked. Specifically, when an unemployed worker accepts a new job paying a wage lower than her previous job, and lower than $15 per hour, a wage supplement would make up part of the gap. Because payments would be made based on work, these payments would also encourage shorter unemployment spells.

Through TERAs, cash requirements during unemployment would become partially self-insured. Individuals could make voluntary contributions to their TERA through paycheck deductions while working. In the event of involuntary job loss, an application for withdrawals from the TERA could be made, with eligibility determination and payment amounts the same as under current UI. Workers who exhaust their TERA balances (or who do not build up savings ahead of time) would be allowed to borrow from their TERA, and then would repay the loan out of future income, with the repayments collected via paycheck deductions as a percentage of earnings. Any positive balance in a TERA at the end of one's working years could be withdrawn at retirement, with interest (discussed in Section II). TERAs would carry repayment insurance for those with earnings too low to complete repayment before retirement; such repayment insurance would forgive any outstanding balances at retirement. In addition, individuals with very low wages would not have to repay some or all of their TERA withdrawals. These features would essentially leave the transfer payments of the current UI system in place for those who do not return to work after job loss and those with very low wages prior to job loss, with greater targeting of these payments to those most in need than exists under the current system.

The proposed system is set up so that government revenue requirements for the wage-loss program, the TERA repayment insurance, and the low-wage coinsurance would be approximately the same as under the current UI system, where each state runs its own UI program

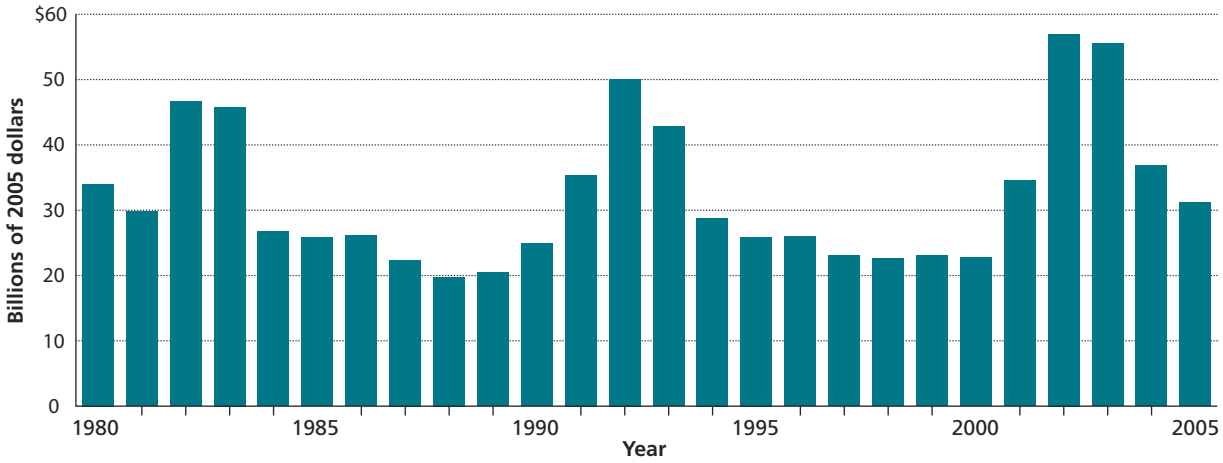
under the guidelines of federal law and the details of the programs differ across states (U.S. Congress 2004). The total amount of benefits paid for the years 1980–2005 are shown in Figure 2. Expenditures on benefits varied substantially with the unemployment rate, ranging from $23 billion in 2000 to $57 billion in 2002, and averaged $43 billion during 2001–05. Revenue is currently raised from UI payroll taxes on firms (where the tax rate varies with the firm's history of layoffs). State payroll taxes are assessed on earnings up to a cap; because the earnings cap in most states is low (in 2005, the earnings cap was $10,000 or less in 27 states), the ratio of taxes to total income is highest for low-wage workers. In this proposal, the revenue needed to support TERAs (equal to one-third of the amounts now collected for UI) would be collected from payroll taxes assessed on a broader tax base of taxable income, resulting in much more equal tax rates for low-wage and high-wage workers. The revenue needed to support wage-loss insurance (equal to two-thirds of the amounts now collected for UI) would be collected from firms to pay directly for the insurance claims of that firm's former employees.

The primary goals of the UI program are to help individuals meet necessary expenses as they search for new employment, and to reduce significant hardship (Advisory Commission on Unemployment Compensation 1995). Additional goals are to help stabilize the macroeconomy, to facilitate the reemployment of unemployed individuals, and to prevent unemployment of individuals. An interlocking system of wage-loss insurance and TERAs would improve the ability of the unemployment system to achieve several of the original goals of UI. The proposed system would help prevent unemployment by linking employer contributions more directly to job losses than under the current system. Currently, firms have an incentive to generate excess unemployment because they do not face the full cost of subsequent unemployment assistance. Use of withdrawals from TERAs rather than traditional UI would also encourage reemployment by reducing rewards for staying unemployed longer. Moreover, the current UI system offers no protection if the worker's next job, with a new employer or even a new industry, pays lower wages than the previous job. Perhaps most fundamentally, insurance payments in the proposed system, based on hourly wage losses after reemployment, would target resources more directly to reduce significant hardship.

A system of wage-loss insurance and TERAs would function similarly to UI in some ways. Those who qualify for UI under the existing law would receive the same

FIGURE 2

Unemployment Insurance Benefit Expenditures, 1980–2005



Source: Author's calculations based on U.S. Department of Labor 2006d.
Note: Sum of all regular and extended state or federal benefits for each calendar year, adjusted to 2005 constant dollars using the GDP chain-linked price index for consumption.

level of cash availability on the same schedule through individual withdrawals from TERAs as they would under current law. Thus, the level of support for consumer spending would automatically increase in periods with high rates of job loss, to help stabilize the macroeconomy in a similar manner to traditional UI. Providing new services without increasing expenditures, however, does mean that difficult trade-offs would need to be made. For example, those who currently experience temporary layoffs and return to their firm and those who have long unemployment spells followed by wage gains would receive smaller government benefits under the proposed system than under the current system.

Many issues about UI, including coverage, eligibility, adequacy of benefit amounts, duration and time-path of benefits, and reduction of fraud are not addressed in this proposal, but are discussed elsewhere; see O'Leary and Wandner (1997) and Karni (1999) for reviews. This proposal does not suggest altering the level of or eligibility for unemployment benefits, for example. Instead, it focuses on the insurance aspects of the system, and complements other important government activities, such as job search assistance, education, and training.

At a deeper level, this proposal is based on the recognition that private insurance markets are highly unlikely to ever offer widespread insurance against the two main costs of job loss: (1) the short-term cost of being without income for a time, and (2) the long-term cost of having reduced lifetime earnings from needing to change employers or career paths, or both, and to accept lower wages. When a private insurer seeks to sell insurance against the costs of job loss, it faces the problem that employees know more about whether they are likely to lose their jobs than the insurance company can reasonably discover, and people who wish to purchase such job-loss insurance would be those who are most at risk for losing their jobs. The firm would have to charge a high premium for selling job-loss insurance to this group, which means that others who are only moderately likely to lose their jobs would find the price of such insurance unattractive. Moreover, private-sector banks are not eager to make weekly loans to people who are unemployed and who are unable to repay the loans until after they are reemployed.

Many individuals can effectively self-insure short-term income losses with some assistance in saving and borrowing (Stiglitz and Yun 2005). In 1998, 46 percent of UI claimants received benefits for 10 weeks or less, and the average total benefit was $1,146 for these claimants (author's calculations including temporary and permanent layoffs and using 2005 constant dollars, based on Folks et al. 2001). The average age of these claimants was 39, making the UI benefit a very small fraction of expected income in the future. However, the current UI system only provides funds to cover short-term income losses and no support for long-term wage losses. This proposal would shift resources to focus on the unmet need for insurance against long-term wage losses that are often too large for individuals to absorb. These losses would be most effectively addressed by social insurance that would spread the risk of long-term wage losses across a large pool of individuals. By providing a type of insurance that the private market does not and will not provide, the government can improve the efficiency of the economy while helping those who are in most distress.

This paper begins with a description of how the combination of TERAs and wage-loss insurance would work from the perspective of individuals, firms, and the government. Section III presents simulation results on the likely costs and benefits of this proposal, based on actual data for the U.S. workforce from 1984 to 1996. Section IV reviews previous related research. Section V discusses the implications of these proposals, drawing on academic studies about different kinds of personal accounts and earnings insurance, as well as experience with related legislation in U.S. states, by the federal government, and in other countries. Section VI discusses some implementation issues, and Section VII concludes.

II. How TERAs and Wage-Loss Insurance Would Work

To compare current UI with this proposal in the context of a concrete example, consider an aircraft assembly employee in California who was making $14 per hour and working 40 hours per week before her plant closed and she was laid off. If she were to apply for UI under the existing system, the state would check to see that she worked for an employer covered by UI, that her earnings in the past year were above a threshold, that her employment was terminated involuntarily, and that she is available now to work. When verified as eligible, she would receive benefits replacing half of her income—in this case, $280 per week. Benefits are financed by a payroll tax on the wages paid to employees at all covered firms, with the firm's tax rate depending in part on the amount of UI benefits paid to former employees of the firm. Payroll taxes from firms are paid to the government, and the government pays UI benefits to eligible individuals.

The workings of the proposal are illustrated by continuing with this example, first taking the viewpoint of the individual, then the firm, and then the government. With the broad shape of the proposal in mind, additional details and system performance simulations are discussed.

Individual's Viewpoint

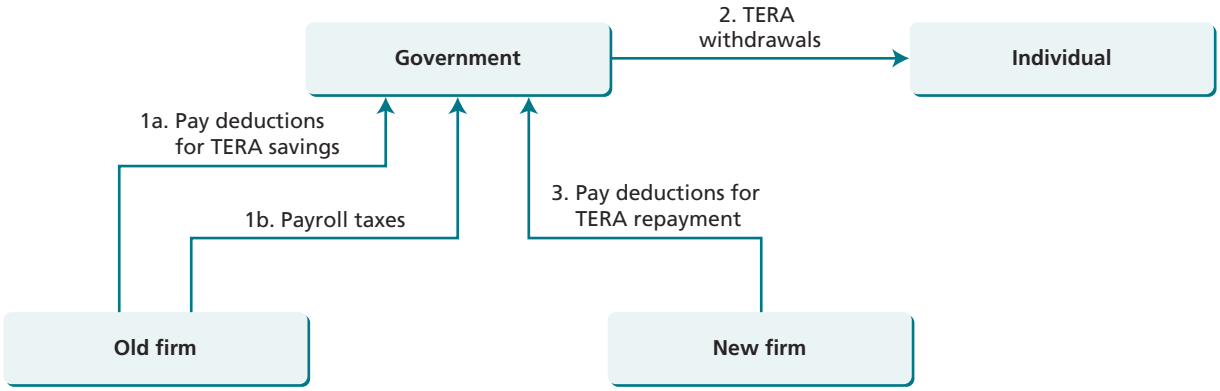
During the course of her 10 years of employment at the firm, the worker voluntarily contributed $2,000 to her TERA. (The default on initial employment was a payroll deduction of 1 percent of pretax earnings contributed to her TERA, and she did not opt out of this contribution schedule.) The account was maintained by the government, and her investments were in government bonds. Funds in the account were excluded from asset tests for Food Stamps, Medicaid, and other government programs, so they did not reduce any potential eligibility for assistance from these programs.

After being laid off from her aircraft assembly job, she could apply to receive the same amount of income as under UI—$280 per week, replacing half of her previous earnings. This amount is treated as taxable income as it would have been under current UI. The eligibility criteria would also be the same as under UI. The difference is that the funds would come from a combination of previously accumulated savings in the TERA and borrowing against future employment income. Say that she remains unemployed for 10 weeks, receiving $2,800. She thus draws down the $2,000 in her TERA and borrows an additional $800, leaving her TERA balance at negative $800. She then takes a new job that pays $10 per hour. Her new firm deducts 5 percent of her earnings from her paycheck until she has repaid the $800 (plus interest). This flow of funds is illustrated in Figure 3. In case of personal bankruptcy, the obligation to repay would be treated similarly to student loans, and would generally not be dischargeable.

The proposal's other main component involves wage-loss insurance. To be eligible for wage-loss insurance payments, a period of unemployment between the involuntary job loss and the next job would not be required, but all other requirements for initial UI eligibility, such as requirements regarding earnings history and nature of the job loss, would still need to be met. In addition, wage-loss insurance would be available only to those with at least one year of tenure with their previous employer; obviously, individuals would need to have taken a new job with a different employer. The amount of the wage-loss insurance per hour worked on the new job would be based on an insured wage rate—either the wage on the previous job or the fixed amount of $15 per hour, whichever is lower—and calculated as 25 percent of the difference between the insured wage rate and the hourly rate on the new job. The insured wage for each individual would be adjusted each quarter for price inflation, as would the level (initially at $15) of the fixed maximum potential insured wage for future claimants and other parameters of the system based on dollar values.

In this example, the aircraft assembly worker experiences a $4 per hour reduction in wages ($14 per hour at the

FIGURE 3
Flows of Funds for TERAs



Source: Author.

previous job, $10 per hour at the new one). Assuming no inflation, her wage-loss insurance payments are 25 percent of this $4 reduction—in other words, the wage-loss insurance payment amounts to $1 per hour. These payments are initially deposited directly in her TERA. They would be used first to repay her incurred $800 loan, which would take about 14 weeks of work at the new job. She would then receive the wage-loss insurance payments for six years, which is a period based on total hours of work in her two years prior to job loss (three hours of insurance coverage for each hour worked, excluding hours worked in the first year on the job). After her TERA balance reached a maximum threshold ($5,000), additional payments from wage-loss insurance would be sent to her by check. Assuming her wage rate did not change, her income drop would be reduced from 28 percent (based on labor earnings falling from $14 to $10 per hour) to 21 percent (including the $1 per hour insurance payment) over the six years she receives payments. If her wage in the new job did rise or fall, the wage-loss insurance payments would be adjusted as well, so that the wage-loss insurance payments in each calendar quarter would be based on the average hourly wage since job loss through that quarter.

The amounts of transfer payments would vary with individual circumstances. Generally speaking, transfer payments to individuals would be smaller under this proposal than they would be under traditional UI for those experiencing unemployment spells followed by employment at wages the same or higher than at the time of layoff. Transfer payments would be the same to minimum wage workers and those who never return to work following a period of unemployment, and transfer payments would be larger after permanent job loss for those working at a new job with a lower hourly wage.

Four special conditions that don't apply to our hypothetical aircraft assembly worker are worth noting here. First, those with very low wages on their previous job would receive supplemental assistance if they needed to borrow funds from their TERA. The members of this group are unlikely to benefit much from wage-loss insurance because the wages of their previous jobs were already so low, limiting their potential wage losses at new jobs, given minimum wage laws. The coinsurance rate for this supplemental assistance would run on a sliding scale, such that someone earning $5.15 per hour would not have to repay any borrowing from the TERA—but also would not receive any wage-loss insurance payments. Such a worker would be in exactly the same position under current UI and under the proposed system.

Second, if our hypothetical worker reached retirement age and filed for Social Security benefits, any positive balance remaining in her TERA would be transferred to an Individual Retirement Account (IRA) for her. If her earnings had been too low to repay any loans from her TERA at the point she would begin collecting Social Security, then TERA repayment insurance would pay off the remaining balance.

Third, if she had opted out of making payroll contributions to her TERA, instead of accepting the default option of making such contributions, her withdrawals during unemployment would have been entirely a loan from her TERA, which she would repay with interest through deductions from paychecks at her new job.

Fourth, if she held two or more jobs with separate employers, each job would be separately insured. Withdrawal amounts would be based on earnings at the specific job that was lost, and the insured wage for wage-loss insurance would be set based on earnings and hours on the lost job. A new job started a week before being laid off from one's main job and a job started a week after a layoff would be treated the same way for the purposes of wage-loss insurance eligibility and payments, with calculation of the post–job loss hourly wage beginning in the calendar quarter after job loss.

Firm's Viewpoint

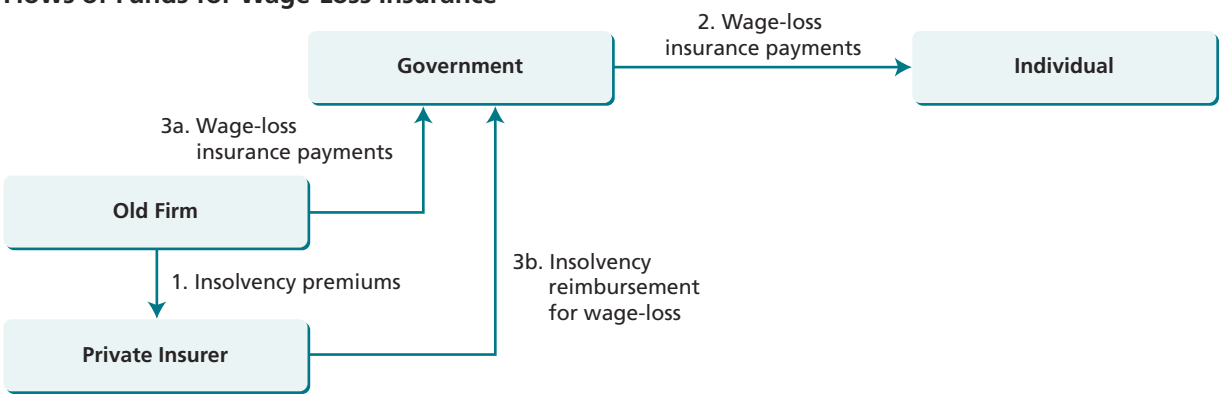
The aircraft-manufacturing firm laying off the individual in the example would submit three types of payments to the government over time. Initially, the firm would send payroll deductions for voluntary saving to the TERA; these deductions reflect contributions made by workers who do not opt out of the default saving mechanism for the TERAs (Figure 3). Taxes based on the firm's payroll (Figure 3), as under the current UI, would support the administration of the system and finance two types of payments: repayment insurance to pay off loans for individuals who retire but who had earnings too low to fully repay their TERA withdrawals, and low-wage coinsurance to reduce potential TERA repayments for those with low hourly wages.

The flow of funds for wage-loss insurance is depicted in Figure 4. Firms would reimburse the government for wage-loss insurance claims of former employees, and the government would pay the employees. Firms would also be required to purchase insurance on the private market to cover wage-loss insurance claims in the event that the firm became insolvent, and the insurer would then make payments to the government in the event of firm insolvency.

In total, firms would make payments to the government for wage-loss insurance, repayment insurance, assistance on TERA repayments for those with low wages, and other costs of the proposed system that would be approximately the same as the current UI system. In terms of funds currently paid in UI benefits, nearly two-thirds of the money would be reallocated to wage-loss insurance, about 30 percent would go to repayment insurance, and 6 percent would be used for supplemental assistance for TERA withdrawals by those with wages near the minimum wage. Thus, revenue from new payments for wage-loss insurance reimbursement would combine with reduced revenue from the payroll tax so that a change to the proposed system would be revenue neutral.

FIGURE 4

Flows of Funds for Wage-Loss Insurance



Source: Author.

The UI taxable earnings base would be increased from the current caps (e.g., 27 states had caps on taxable earnings of $10,000 or less in 2005) to the Social Security earnings base (which was $90,000 for 2005, and which increases annually with the national wage index). The reduced revenue needs from the UI payroll tax combined with the broader tax base would allow average payroll tax rates to be substantially reduced. UI tax rates would continue to vary by firm as under traditional UI (according to previous use of TERAs by former employees, as opposed to previous payments of UI benefits to former employees). These rates would be more tightly linked to firm layoff histories through the combination of lower average tax rates and a lowering of the minimum rates that states require firms to pay. Since firm-varying rates would be less constrained by the floors and ceilings that characterize the current system, firms that lay off workers would see higher UI payroll taxes in the future.

A firm that hired a previously unemployed worker would carry out mandatory payroll deductions for repayment of loans when that employee's TERA withdrawals had resulted in negative TERA balances. Such deductions would appear on pay stubs as pretax deductions, similar to health insurance, retirement plans, and dependent care expense accounts. This flow of funds from the new firm to the account maintained by government is shown in Figure 3.

Government's Viewpoint

Under current law, UI is run by the states under the oversight of the federal government, and this pattern would remain in place under this proposal. States would continue to be responsible for verifying a person's eligibility for unemployment benefits. States would also determine how much each unemployed person could withdraw from his or her TERA per week. States would continue to collect payroll taxes, which would be used for TERA repayment insurance and low-wage coinsurance.

The flows of funds to the government from firms and insurers and from the government to individuals are shown in Figures 3 and 4. If eligible, individuals could make TERA withdrawals and receive wage-loss insurance payments. It is sometimes proposed that a minimum size should be set for the level of payments because, for example, very small wage losses could lead to very small payments. However, once an employee has borrowed from a TERA and the wage-loss insurance program has been established, the administrative cost of making these payments would be very low. Once a claim has been approved, benefit amount determination and deposits can essentially be automatic, based on employer reports of earnings and hours for each quarter.

The federal government would manage the TERAs in this system. The government can take advantage of economies of scale to keep costs low, and it can avoid TERA transfers when individuals change employers or move across state lines. The interest rate on government bonds would be the rate of interest required for repayment of borrowed funds.

Funds in the TERAs would be invested and earn a rate of return on positive balances. The automatic default investment would be in government bonds. Such a safe default investment seems appropriate given that job loss is an unpredictable event and the savings may be needed at any time. For positive TERA balances, workers could opt into a portfolio with a mixture of stocks and bonds, where the portfolio composition varied depending on the retirement age of individual, modeled on the federal Thrift Savings Plan's recently introduced life-cycle funds. Changes from bonds to life-cycle funds would be allowed once per calendar quarter.

The federal government would also have the power to authorize extending the standard 26-week period in which the unemployed person can make withdrawals from a TERA, just as the federal government now can extend eligibility for unemployment benefits when the economy is in or near a recession. During the extended period, individuals could continue to make withdrawals and borrow from their TERAs. Firms would not have their future payroll tax rates increased because of withdrawals during the extended period. Federal unemployment taxes would contribute to the repayment insurance that would cover borrowed funds that were not repaid.

III. Simulations of the System

This section uses historical data on wages and amounts of UI receipt to estimate the amounts of savings, borrowing, repayment insurance, low-wage coinsurance, and wage-loss insurance that would have taken place from 1984 to 1996 if the proposed system had been in place.

How the Simulation was Conducted

The data used in this simulation are from the Panel Study of Income Dynamics (PSID), which is based at the University of Michigan. The PSID has been tracking a representative sample of U.S. individuals and families since 1968. Most other sources of government data on unemployment or UI are snapshots of what is happening in a certain month or year. For example, the data tell the number of people unemployed in each year, but they don't reveal whether the same people have been unemployed for several years or what sorts of jobs and wages were gained by those who were formerly unemployed. The PSID, by contrast, tracks family units over time, so it provides data for analyzing how long workers have been unemployed and the patterns of their future employment over time. The variables extracted from the PSID include annual labor earnings, annual hours of work, age, and UI compensation. All dollar variables in this discussion are adjusted for inflation and expressed in terms of 2005 dollars (using the chain-linked GDP price deflator). The sample for this simulation focuses on family heads and their spouses in 1984 that had data available in subsequent and consecutive years. Years of data in the PSID prior to 1984 are not used in the simulation because separations from previous employers are not clearly identified and not classified as temporary or permanent, and because UI data are not reported for spouses of family heads. The simulation ends with data for 1996 because later data were collected only every other year.

The simulation of TERAs and wage-loss insurance is calibrated to match historical expenditure and revenue levels. The unemployed are assumed to withdraw from TERAs what was actually paid in UI and firms are assumed to pay the same amount under the proposed plan as they did in taxes to support the current UI system. The duration of the wage-loss insurance payments (in terms of hours compensated) is adjusted so the total of such payments and unpaid TERA loans at retirement (with proper accounting for appropriate interest payments) equal total UI actually paid. The simulation assumes that people's earnings and the duration of their unemployment are unaffected by the proposal. Possible incentive effects on earnings, duration, and other aspects of individual behavior are discussed in Section V.

To simulate the proposals, a number of details needed to be specified. Wage-loss insurance provides payments equal to 25 percent of the difference between the insured wage and the wage on the new job, and the insured wage is the lower of $15 per hour or the wage on the previous job. The coinsurance rate for borrowing from a TERA among earners with very low wages is a sliding scale, going from 0 percent at $7 per hour to 100 percent at $5.15 per hour on the previous job. The loan repayment rate is 5 percent of earnings at the new job. In addition to these programmatic details, some other assumptions are necessary. The participation rate is assumed to be 50 percent in the default option of a 1 percent payroll deduction for savings if the TERA balance is not negative. Interest rates are based on three-month Treasury bills, and all individuals are assumed to keep positive balances in government bonds. Individuals are assumed to retire at age 65.

Simulation Results

Simulation results are shown in Table 2. The simulation was calibrated to work with a balanced budget. The approach was to start off with the amount that firms actually paid to the current UI, and then to figure out how that total amount could be reallocated among three types of insurance described in this proposal: (1) repayment insurance to cover paying off the TERA loans that were not repaid because the worker retired; (2) coinsurance

TABLE 2
TERA and Wage-Loss Insurance Simulation Results

Proportion with positive ending balance if ever withdrew from TERA	0.63
Proportion of withdrawal dollars from TERAs with positive ending balances	0.37
Ratio of repayment insurance payments to total withdrawals	0.30
Ratio of low-wage coinsurance payments to total withdrawals	0.06
Ratio of total wage-loss insurance payments to total withdrawals	0.64
Wage-loss insured hours per hour worked in two years prior to job loss	3.0
Ratio of total paycheck contributions to total withdrawals	1.3

Source: Author's calculations using data from the PSID, 1984–96.
Note: Simulation assumptions and parameters are as described in the text.

to reduce individual contributions to TERA withdrawals for individuals with extremely low hourly wages (below $7 per hour); and (3) wage-loss insurance. The amount of repayment insurance needed at the end of the simulation was 30 percent of all TERA borrowing over time. An additional 6 percent was used to make coinsurance payments to workers with very low wages. The other 64 percent of the value of traditional UI payments was used for wage-loss insurance. The take-up rate for wage-loss insurance was assumed to be 70 percent, about the same as for traditional UI (Blank and Card 1991). The wage-loss insurance funding provided payments for three hours worked on the new job for every hour worked in the two years prior to job loss, so someone working full-time before and after a job loss would receive wage-loss insurance payments for six years.

Overall, 18 percent of individuals received UI payments at least once during this 13-year historical period. Under the proposal, they would make withdrawals or borrow from TERAs. Despite such withdrawals or borrowing, the majority of these individuals would wind up with a positive TERA balance through a combination of voluntary saving, repayment of borrowed funds, and wage-loss insurance payments. These individuals tended to have withdrawn smaller amounts. Of all funds withdrawn from TERAs, 37 percent were from TERAs that had a positive balance in the end.

The last row of Table 2 shows the ratio of total paycheck deductions to total withdrawals (expressed in present value terms). On average, the values of paycheck contributions and withdrawals are equal when this ratio is 1.0. The estimate in Column 1 shows that the ratio in the simulation is 1.3, indicating that individuals are, on average, saving 30 percent more than they are withdrawing from the TERAs.

Distributional Effects

Among those experiencing a permanent job loss and having one year of tenure with their previous employer, 43 percent received at least some wage-loss insurance payments. Thirty-four percent of all workers had lower hourly wages when averaged over the 10 years after job loss, and 29 percent had wages that were both lower than their previous wages and below $15 per hour. The distributional effects of this proposal for those whose wages after job loss were lower than their previous wages and lower than $15 per hour are shown in Table 3, based on the simulation. For this table, each observation is an individual with at least one year of tenure at a firm having an involuntary separation from that employer during the period 1984–88. The percentage change between pre- and post-separation hourly income was calculated for three different income measures in the three columns: (1) labor earnings, (2) labor earnings plus UI (the current system), and (3) labor earnings plus wage-loss insurance plus TERA repayment insurance plus TERA low-wage coinsurance (the proposed system). Income was measured each year for which complete data were available in subsequent years (through 1996) to assess a fairly long-term cumulative impact, for an average of 10 years after job loss for this sample. After the initial permanent job loss, individuals may experience subsequent temporary or permanent layoffs, and additional UI and wage-loss insurance payments from these events are included to capture the cumulative effect.

In Table 3, the first column is based only on hourly income from labor earnings. The first row indicates that 15 percent of all separations with wage losses had hourly

TABLE 3

Effect of UI versus Wage Loss Insurance (WL) and TERAs on the Distribution of Insured Wage Losses over the 10 Years Following Separation

Change in income per hour worked	Earnings only	Earnings + UI	Earnings + WL + TERAs
50 percent loss or more	15	14	7
25 percent loss or more	42	38	31
Any loss	100	92	91

Source: PSID.
Note: The data are 357 observations with hourly wages below their insured wage after job loss, where the insured wage is the lower of $15 or the wage at the end of the old job, selected from the 70 percent of permanent job losers predicted to file wage loss insurance claims. Each observation is an individual with one year or more of tenure having a first permanent involuntary separation from an employer in the period 1984–88 and valid reports of hourly wages before and after separation. Earnings are observed through 1996 for an average of 10 years post–job loss. Income is defined in the three columns, respectively, as labor earnings, labor earnings plus UI payments, and labor earnings plus wage-loss insurance plus repayment insurance for TERA negative end period balances plus TERA low-wage coinsurance. Each row shows the percentage of this sample having a change in income per hour worked.

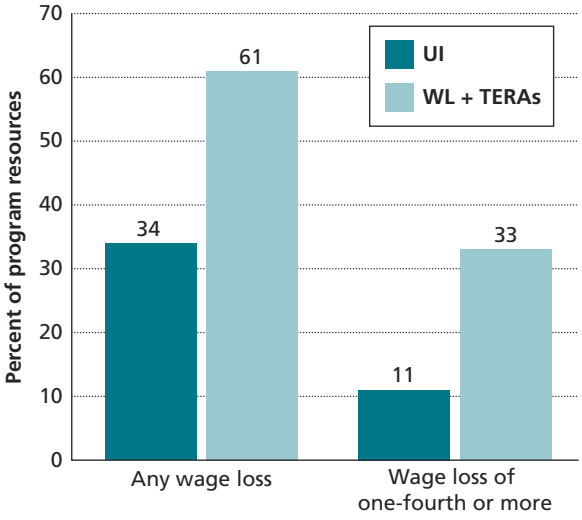
labor income losses of 50 percent or more. The second column is based on hourly income from labor earnings plus UI payments after separation. The percentage of workers with losses of 50 percent or more was 14 percent, or 1 percentage point lower than without including UI. The third column is based on hourly income from labor earnings and the new system proposed in this paper: wage-loss insurance (WL), repayment insurance for TERAs, and low-wage coinsurance for TERAs. The percentage with losses of 50 percent or more is cut in half to 7 percent.

While the new forms of insurance proposed in this paper are effective at reducing extreme losses, there are inherent limits to the extent that losses can be reduced within this framework. Say, for example, that an individual had an earnings loss of 40 percent relative to her insured wage for 10 years after job loss. Wage-loss insurance provides payments that make up 25 percent of this loss, but the loss would still be 30 percent over the 10 years. Of course, it is theoretically possible to have insurance cover the entire wage loss, but this would certainly have undesirable effects on the incentives of individuals to seek higher wages on their new jobs. Raising the rate at which losses are replaced would also require financial resources exceeding those currently used for traditional UI. In addition, raising the rate would have to be weighed against the incentive effects of a high replacement rate (discussed in detail in Section V).

Another way to examine how effectively systems target resources to those with wage losses is to examine the proportion of the program dollars received by different groups, as shown in Figure 5. Among permanent job losers who were eventually reemployed, UI allocated 34 percent of resources to long-term wage losers, while WL and TERAs targeted 61 percent to this group. The proportion of resources devoted to those with long-term wage losses of one-fourth or more was three times higher for WL and TERAs than for UI.

FIGURE 5

Distribution of Program Resources Received by Permanent Job Losers



Source: Author's calculations based on data from PSID, 1984–96.
Note: Data are 1,296 observations of individuals with one year or more of tenure having a first permanent involuntary separation from an employer in the period 1984–88 and valid reports of hourly wages before and after separation. Earnings are observed through 1996 for an average of 10 years post–job loss. WL + TERAs includes wage-loss insurance plus repayment insurance for TERA negative end period balances plus TERA low-wage coinsurance.

For those with wage losses of one-fourth or more, WL and TERAs provided benefits over 10 years equivalent to an average of 12 percent of the wage level on the preseparation job, while UI provided benefits over 10 years equivalent to an average of 3.5 percent of the preseparation wage. For other permanent job losers, both systems provided benefits per hour worked equivalent to an average of 3 percent of the preseparation wage.

As a budget-neutral proposal, the shifting of resources to support those experiencing long-term hourly wage losses from permanent layoffs implies that transfers are reduced for some other groups. Under this proposal, those who are temporarily laid off and return to the same firm make TERA withdrawals that they later repay, and this group receives smaller net transfers from the proposed system than they do under UI. Individuals who lose their job, experience a long spell of unemployment and TERA withdrawals, but then find a new job at a higher wage than their previous job also receive smaller net transfers from the proposed system than they do under UI; younger workers are relatively more likely to experience this event.

Wage-loss insurance and TERAs also would substantially increase the share of unemployment benefits received by those making less than the median income. Table 4 shows that compared to the current UI system, wage-loss insurance and TERAs would reduce the share of program benefits received by those in the top quartile of the income distribution, leave unchanged the share of benefits received by those in the second quartile, and increase (from 43 percent to 54 percent) the share of benefits received by those in the bottom half of the income distribution.

TABLE 4

Share of benefits by income quartile, in percentages

	UI	WL + TERAs
Lowest	8	8
3rd	35	46
2nd	37	37
Top	20	9

Source: Author's calculations based on data from PSID, 1984-96.
Note: Data include 7,010 PSID household heads and spouses in 1984, ages 20-64. Observations used from annual interviews conducted consecutively from 1984-1996 through age 64. UI benefits are the present discounted value of UI payments divided by the number of person-years of data observed. WL + TERAs is the present discounted value of wage-loss insurance, repayment insurance for TERA negative end period balances, and TERA low-wage coinsurance divided by the number of person-years of data observed. Income is the present discounted value of annual labor earnings divided by the number of person-years of data observed. Quartiles are based on rank by income, and divide the data into four equal-sized groups incorporating survey weights.

IV. Related Research

In making predictions about how this combination of TERAs and wage-loss insurance would work, we are not operating in a vacuum, fortunately. Over the past 15 years or so, several bodies of work and experience have built up that are relevant to this proposal. One such body of work is about the operation of earnings insurance. A second body of work is about the operation of accounts designated for various purposes. A third body of work is about programs in which government seeks to ensure that loans would be repaid out of future income. In addition, the extensive literature on UI and other social insurance programs is informative about incentive effects. The proposal for wage-loss insurance and TERAs draws on these analyses and experience.

Earnings Insurance

In U.S. policy discussions, insurance for earnings losses following job displacement has received the most attention in the context of free trade—compensating individuals losing jobs as a result of import competition (for a summary of these arguments, see Kletzer 2003). This discussion contributed to the establishment of a program of earnings insurance called Alternative Trade Adjustment Assistance (ATAA), which was enacted as part of the Trade Adjustment Assistance Act of 2002 (Baicker and Rehavi 2004). ATAA provides earnings insurance for individuals aged 50 or older who are reemployed full time within 26 weeks after their unemployment spell, with an earnings subsidy equal to 50 percent of the difference between the earnings on the previous and new jobs (as long as the new job pays less than $50,000 per year) up to a total of $10,000 in benefits, or until two years has elapsed since reemployment. Firms must have their layoffs certified by the government as having been caused by trade.

The discussion leading up to the passage of this legislation led to some proposals for extending earnings insurance to all individuals experiencing involuntary job loss—and not just those who lose jobs because of trade (Jacobson et al. 1993, Baily et al. 1993, Parsons 2000). For example, Kletzer and Litan (2001) offer a proposal in which employees with at least two years of tenure at a firm that suffered involuntary permanent job loss would receive earnings insurance for two years based on the difference in earnings at the previous and new jobs. They estimate that the cost of providing earnings insurance would be less than $3 billion per year if it were limited to those who were employed full time on both their previous and new jobs, and if the benefits for any one individual were capped at $10,000 per year.

The Canadian government experimented with earnings insurance in the late 1990s in the Earnings Supplement Project (ESP). In this program, some individuals randomly received earnings insurance in addition to UI, while others only received UI, in order for researchers to examine the effects. In ESP, eligible displaced workers who were reemployed within 26 weeks in a new full-time job (minimum 30 hours per week) received supplemental payments covering 75 percent of any earnings loss for each week worked, for up to two years after initial job loss and random assignment. The supplement was capped at $250 per week and earnings above the maximum UI amount were not counted when calculating the ESP payment.

The Canadian ESP results showed that earnings insurance could effectively offset part of earnings losses while having little impact on other behavior (Bloom et al. 1999). Some observers have viewed the program as a failure because UI expenditures were not reduced appreciably; the primary goal of the program was to accelerate reemployment and to reduce traditional UI expenditures, since every additional week unemployed was one fewer week that one could be receiving the earnings subsidy that ended after two years. The primary motivation of the proposal in this paper, however, is not to reduce government payments. The motivation, rather, is to target assistance to those in most need, and the Canadian results demonstrate that transfers can be targeted to those with earnings losses without significant adverse incentive effects.

Finally, the incentives of wage-loss insurance can be related to a past literature concerning negative wage taxes. A number of scholars have proposed and analyzed a negative hourly wage tax, where payments (which can be viewed as negative taxes) were made as a fraction of the difference between a target wage and the actual wage (for example, Muth 1966, Kesselman 1969, Zeckhauser and Schuck 1970). In fact, a subsidy for hourly wages was passed by the U.S. Senate in 1972 (U.S. Congress 1972, analyzed by Haveman 1973), although it was dropped in House-Senate conference. The approach has continued to be of interest and discussion (for example, Browning 1973, Barth 1974, Lerman 1982, Betson and Bishop 1982, Besley and Coate 1995, MaCurdy and McIntyre 2004). Wage-loss insurance operates exactly like a negative wage tax, offsetting a fraction of the difference between a target wage and the actual wage—but is restricted to those having involuntary job losses.

UI Accounts

Individual accounts have been discussed for some years as a supplement either to retirement planning or to health insurance. More recently, a number of proposals have surfaced for accounts focused on unemployment. Topel (1990) provides an early discussion of the main conceptual features of personal accounts with savings, borrowing, and repayment. Feldstein and Altman (1998) provide rough estimates of the levels of taxation and transfers that would be required under a proposed system of UI savings accounts.[1] Stiglitz and Yun (2005) show that when the duration of insured unemployment is short relative to the period of employment, the theoretical optimal system involves extensive use of a form of borrowing against individual retirement assets in order to reduce risks from unemployment, while also improving job search incentives relative to a system of traditional UI. Shimer and Werning (2005) discuss the theoretical importance of ensuring that workers have sufficient liquidity to maintain living standards after job loss, and emphasize the distinct potential role for public policy in facilitating savings and borrowing for those who become unemployed, and in providing insurance.

Personal accounts for payments during unemployment have been implemented in eight Latin American countries (Ferrer and Riddell 2004). The TERA proposal in this paper has one major difference from many existing plans: The existing plans are typically implemented solely by having people save in advance of the need for unemployment benefits, while the TERA approach involves both such advance savings and borrowing, with repayment of borrowed funds after the unemployment period is over. Despite this clear difference, some evidence on the feasibility of TERAs can be gleaned from currently functioning systems. For example, Chile uses personal accounts for protection against loss of income during unemployment, and makes withdrawals from a common fund if the individual TERA reaches a zero balance.[2]

The United States has recently introduced a pilot program involving accounts, although these personal reemployment accounts are not intended to provide income support during unemployment. These accounts can have $3,000, provided in addition to UI benefits, for eligible unemployed workers who are likely to exhaust their UI

1. Feldstein and Altman (1998) are especially interested in whether a system of accounts could have positive balances at retirement for those who made withdrawals, resulting in individuals with shorter unemployment duration being be rewarded with greater retirement savings. They propose a mandatory contribution rate of 4 percent of earnings (toward both positive and negative balances in accounts). Using historical data on individual earnings, they find their system resulted in 42 to 56 percent of benefit dollars going to those with positive account balances at retirement. Graetz and Mashaw (1999) put forward a related, less-detailed proposal for unemployment insurance copayments to be withdrawn from personal retirement accounts. Fernandez (2000) and Orszag and Snower (2002) also offer research focusing specifically on UI savings accounts.
2. For a description of Chile's system, see Acevedo and Eskenazi (2004); for a discussion of special challenges for developing economies, see Sehnbruch (2004). In brief, the mandatory Chilean system works as follows: Workers contribute 2.2 percent of wages to personal accounts. An additional 6.1 percent of total wages for up to 11 years of employment is contributed to the account if an individual had an open-ended labor contract and there was an involuntary separation. The balance in the account is paid after separation and one month of unpaid unemployment, with payments in five equal installments. If the account has a balance with less than two months' current wages, the government tops up benefits so the replacement rate is at least 50, 45, 40, 35, and 30 percent in months two through six, respectively, after the separation of worker and employer. The additional government payments are funded partially by general revenues and by a payroll tax of 0.8 percent of wages. The use of a common fund on which an individual with low balances can draw distinguishes Chile's system from others in Latin America.

benefits. Factors used to determine worker eligibility for these accounts include local unemployment rates, prior employment in a declining industry, the participant's level of education, and the participant's recent job tenure. Seven states are participating in the pilot program (U.S. Department of Labor 2006b). Workers can use account funds to purchase intensive career, job training, and supportive services and products from public One-Stop Career Centers and from the private market. Workers can also use their accounts to buy services and products such as childcare, clothes, tools, uniforms, transportation, and auto repairs—that is, items and services needed to help find and retain a good job. Individuals who find employment within 13 weeks of the account establishment would receive a reemployment bonus of the funds remaining in the account.

Income-Contingent Loans

Funds borrowed from TERAs would be repaid out of future income. Several countries in addition to the United States—Australia, Chile, New Zealand, South Africa, and the United Kingdom—have experimented with income-contingent loans—not for unemployment, but as a way of repaying loans for higher education (Chapman forthcoming). Repayment of loans is typically required after income rises above some threshold. Early proposals, such as that implemented at Yale University in the 1970s (Nerlove 1975) and those proposed in the U.S. Congress in the 1990s (Krueger and Bowen 1993) had repayment amounts that depended on the income of other borrowers and repayment for high earners that could substantially exceed those under conventional loans. Later implementations in the United States and elsewhere are more similar to the TERA, where repayment depends only on one's own income, and social insurance repays the loan if the borrower's income turns out to be very low. For example, the U.S. Department of Education offers an income-contingent repayment plan, where the monthly payments are based on payments for a conventional 12-year loan multiplied by a percentage that varies with annual income, or 20 percent of monthly discretionary income, where discretionary income is defined as adjusted gross income from one's tax return minus the federal poverty level for one's family size. The maximum repayment period is 25 years, after which unpaid loan amounts are forgiven (and taxes are paid on the amount discharged). This plan is seldom chosen by students, apparently because most loans are fully repaid at the same rate of interest, yet the plan is more complex than other repayment options, and only those with extremely low incomes over 25 years ultimately receive loan forgiveness (Johnstone 2004).

V. Incentive Effects and Behavioral Responses to Proposal

Changing from UI to a combination of TERAs and wage-loss insurance would affect the incentives faced by firms and individuals in a number of ways. This section discusses the likely effects on firm decisions about temporary layoffs, permanent layoffs, and hiring, and then discusses the effects on the decisions of individuals immediately after job loss, during the job search, and on the work effort on a new job. In making predictions about how the proposals would affect incentives, this section draws in many places on existing studies. The main conclusions are presented first, and then each decision is discussed in detail.

Replacement of UI with TERAs should reduce temporary layoffs by 10 to 15 percent. This reduction arises from forcing firms to bear more of the direct cost of layoffs. In addition, since most employees who become unemployed would bear the costs of unemployment benefits directly, they would be much more likely to voice strong opposition to temporary layoffs than they are under UI when they receive payments with no corresponding future obligations. Firms in industries with frequent temporary layoffs would be pressured by the labor market to raise wages in order to continue to attract workers who, under the proposal, would be self-insuring income loss during layoff through savings and borrowing.

Firms making permanent layoffs would face increased costs for doing so. For example, firms in declining industries would face a prospect of large wage-loss insurance payments because individuals who are laid off in such industries are unlikely to be reemployed doing similar work as on their previous job and are more likely to end up in a job where their accumulated experience is of less value. Firms with high wages and frequent permanent layoffs would feel market pressure to reduce wages to cover the cost of wage loss insurance for workers who were likely to be laid off and who faced low prospects for finding work at similar wages. They would thus be effectively giving the opportunity to those most in need of wage-loss insurance to pay for it themselves with lower wages on their current job, resulting in the same average future compensation (after incorporating the prospect of layoff) but with lower variability due to the insurance.

As the costs of laying off longer-tenured workers increases, firms may accelerate their decisions about retaining new hires. The provision of the proposal that hours during the first year with an employer would not count toward potential wage-loss insurance payment duration would substantially reduce the potential disincentives to make new hires by allowing the firm to assess the fit of a new employee with the firm during the first year on the job. In fact, Farber (1999) shows that half of all separations occur during employees' first year on the job.

In comparison with UI, use of TERAs should reduce the average amount of time that people spend out of work. Use of TERAs instead of UI increases the price for additional unemployment (at least among those who do not expect to retire with an unpaid loan), because TERA withdrawals would need to be repaid from future income. As a result, the introduction of TERAs may reduce the overall duration of unemployment by 5 to 10 percent.

The duration of unemployment would also be affected by the availability of wage-loss insurance. Individuals considering a job offering a wage below their insured wage level would be more likely to accept it, since the hourly rate of pay would be augmented by wage-loss insurance payments. Making work more rewarding should reduce the tendency of some people to become discouraged and to remain unemployed or even stop looking for work. This reduced duration of unemployment is unlikely to be associated with workers taking jobs too rapidly, rather than waiting more patiently for a more productive job match.

Temporary Layoffs

For about 40 percent of current UI claims, the individual is recalled to work at the same firm (Needels et al. 2001). When firms are able to lay off employees without paying the full costs, it can sometimes be in the interest of both the firm and the employee to have a temporary layoff subsidized by others. This situation arises because the current financing system for UI involves an imperfect experience rating. In most states, the tax that firms pay to the existing UI program is based on charges for previous experience with UI—the UI claims of that firm's former employees. However, there are minimum and maximum rates—and a firm already at the highest tax rate for UI will not face additional charges if it lays off additional employees. In addition, firms in most states are not charged for laying off employees that they have employed for two quarters or less, with UI claims of those employees being paid in part by a previous employer and in part by general contributions to the system. The combined effect of these provisions is that firms can pay into the UI system less than the full cost of benefits received by employees who have been laid off by those same firms. These incentives for firms have encouraged temporary layoffs and short-term hiring by some firms, particularly those in construction, mining, and manufacturing, because these industries consistently receive cross-subsidies from other industries in the UI system (Anderson and Meyer 1993). When the state of Washington strengthened the link between employer payments for layoffs and the costs of benefits paid (increasing experience rating), both labor market turnover and the number of UI claims declined (Anderson and Meyer 2000).

Replacing UI with TERAs would strengthen the link in two ways between employer payments and the amount of assistance received by unemployed individuals who formerly worked at that firm. The first way is that more firms would see a change in their payroll tax payments if they lay off employees, because minimum rates would be lowered and fewer firms would be at the maximum payroll tax rate—both of which would lead to having more firms in the range of payroll tax rates where tax payments increase if employees are laid off. Fewer firms would be at the maximum rate both because the taxable earnings base is proposed to be broader, and because firms would be charged approximately 36 cents for each dollar withdrawn from a TERA rather than being charged dollar for dollar as under UI, with these lower revenue needs resulting in fewer firms facing maximum rates. (The ratio of 36 cents per dollar is based on the simulations in this paper of the funds needed for repayment insurance and low-wage coinsurance.) Firms can have lower payments because the taxes would need to cover only employees who retire with earnings too low to repay their loans and for those with very low wages.

The second way that experience rating would be strengthened would be through the response of market wages. Employees would know that they would directly bear the costs of repaying any borrowing from TERAs (unless employees were on the verge of retirement or had very low wages). In this setting, firms that employees expect may have layoffs—either based on their observable histories of layoffs or other information—would need to increase wages paid relative to those paid under UI. Thus, firms with a greater likelihood of layoffs would need to bear some of the costs in the form of higher wages paid to workers.

Overall, replacement of UI with TERAs is anticipated to reduce temporary layoffs by 10 to 15 percent, due to reduced cross-subsidies from other firms through increases in payroll taxes for each layoff and pressure to increase wages to compensate for layoff risk. The preceding is based on estimates that a shift to a system where firms bear the full cost of layoffs would reduce temporary layoffs by 20 percent (Anderson and Meyer 1994). In addition, since employees who become unemployed would bear the costs of unemployment benefits directly, they would be much more likely to protest temporary layoffs than they are under UI when they receive payments with no corresponding future obligations.

Permanent Layoffs

The incentives affecting firms differ in the case of permanent versus temporary layoffs. From the firm's point of view, a permanent layoff involves a larger decision about labor costs, and in many cases the firm may lack any realistic alternatives to the layoffs. Thus, even though TERAs would reduce cross-subsidies from low-turnover

firms to high-turnover firms, set up a situation where more firms must pay the marginal cost of each layoff, and pressure firms to increase wages to compensate for layoff risk, these changes in incentives are likely to have a larger effect on temporary layoffs than on permanent layoffs.

Firms would also recognize that, under the proposals in this paper, permanent layoffs differ from temporary layoffs because individuals permanently separated from the firm could become eligible for wage-loss insurance, as well as for TERA withdrawals. The firm knows that it would need to repay wage-loss insurance payments. This cost is likely to be shifted to employees in the form of lower wages, much as market-level costs of UI are shifted to wages (Anderson and Meyer 1997). Firms in industries where workers are paid a premium relative to the wages that their education and experience would receive in other industries must recognize that their potential wage-loss insurance payments for laying off workers would be particularly large.

The market forces leading to these effects are anticipated to be similar to those for which mandated benefits for workers result in offsetting lower wages for those workers, as shown in other contexts, including workers' compensation (Gruber and Krueger 1991) and health insurance (Gruber 1994). When the prospect of wage-loss insurance is translated into an effect on current wages, there are two key issues: the probability of layoff, and the expected wage loss conditional on layoff. The firm has far more information about the probability of layoff than a private insurer would, and thus can potentially price much more effectively than could a third-party underwriter. Incorporation of the costs of wage-loss insurance into wages would allow firms concerned about large permanent workforce reductions in the future to maintain labor costs and current employment levels on implementation of this proposal. Meanwhile, firms with little expectation of layoffs (and reduced payroll taxes) would have incentives to increase wages.

If the cost of wage-loss insurance is factored into wages, then the system is essentially providing wage-loss insurance at cost, which people want but can't otherwise get. Some individuals would see their wages rise under this proposal (if they are unlikely to be laid off or to have a lower wage rate after a layoff) and others would see reduced future wage growth or wage declines (if they are likely to be laid off and to have a lower wage rate in the future). The lower wages coupled with wage-loss insurance actually help the employees as a group by providing the same average level of compensation but reducing the variability.

Having firms pay the costs of wage-loss insurance can also affect the composition of layoffs, with firms being less likely to lay off older workers, who tend to be more likely to experience wage losses. Essentially, firms would have an incentive to incorporate the social cost of the loss of skills and experience that are specific to the current employer—as measured by the difference between an individual's wage with her current firm and her other options—into its permanent layoff decisions.

While it would be possible to pay for wage-loss insurance through other mechanisms (such as a flat-rate payroll tax), these would typically involve growing sectors of the economy making payments that are received by those formerly employed in declining sectors. Although there may be some special conditions where there are specific unexpected impacts that cause sectoral decline (such as a particular trade agreement that is expected to benefit many and adversely impact others) and for which support of a declining sector would be justified on equity grounds, in general it would be preferable to address these conditions with solutions crafted for the circumstances. A general policy involving transfers to declining sectors would distort investment decisions, be an inefficient use of resources, retard economic growth, and ultimately result in more permanent layoffs in the aggregate than a financing system under which firms pay the wage-loss insurance of their former employees.

Hiring

The proposal in this paper links payments to the government more closely to the decision to lay off employees. Firms that do face higher firing costs—and costs associated specifically with firing are anticipated to be higher under this proposal than under current UI—might become more interested in new hires who are currently

employed than those who are unemployed. The theory is that the firm may believe that the currently employed may be less likely to need to be fired in the future. Kugler and Saint-Paul (2004) develop this idea and use unjust-dismissal provisions in the United States to show how increased firing costs reduce the reemployment probabilities of unemployed workers relative to employed workers. This pattern would tend to make it more difficult for those experiencing involuntary job loss to become reemployed.

The tighter linkage of costs and personnel decisions are likely to reduce both permanent layoffs and, especially, temporary layoffs, but it would also affect hiring, making firms less likely to retain for more than a year employees who may be expensive to fire. The proposal's provision that hours during the first year with an employer would not count toward potential wage-loss insurance payment duration gives firms a year to assess the new employee's fit with the company and would thereby substantially reduce firms' disincentives to make new hires.

Worker Consumption after Job Loss

Income support is important after job loss. Gruber (1997) finds that increases in UI benefits reduce the drop in consumption during unemployment, indicating that individuals are not able to fully maintain their standard of living using the combination of current UI, savings, and borrowing. Browning and Crossley (2001) and Bloemen and Stancanelli (2005) provide more direct evidence for the importance of borrowing constraints by showing that the link between UI and consumption holds only for the subset of individuals who report holding few assets at the time of job loss—but nearly half of job losers in the United States report zero liquid wealth at the time of job loss. Private lending markets are unenthusiastic about making a series of regular small loans to recently unemployed persons who may have no collateral, but the government has the ability to make such loans and use paycheck deductions as a way of automating and ensuring repayment.

The change from current UI to TERAs may lead some individuals to decide not to file a UI claim. Those who did not save in their TERA but have other savings sufficient to maintain their living standards for a time after a job loss might apply for unemployment benefits under current law, but would prefer not to make a withdrawal from a TERA that would require repayment of principal and interest as a percentage of future earnings.

Job Search and Reemployment

For the majority of individuals, making withdrawals from a TERA means receiving funds that they will have to repay or that they otherwise would spend in retirement. In effect, making a withdrawal from a TERA means that the individual is spending his own money, and not receiving a transfer from the government. Communications from the government to individuals can help people to make the connection between the amount borrowed from a TERA and the money that would be owed in the future. For example, checks could be accompanied by statements that include graphics showing the total amount borrowed to date, and the total amount that will have been borrowed after six months. The resulting awareness is likely to affect decisions about how long to stay unemployed, how much effort the individual would put into his search for a new job, and what job to accept. Of course, if an individual is only a few months from retirement and expects to have an unpaid TERA loan on retirement, then he would likely treat borrowing from such an account as similar to traditional UI payments—rather, as a transfer from others rather than as a transfer from her own funds.

In comparison with UI, use of TERAs should reduce the average amount of time that people spend out of work. With traditional UI, unemployed workers tend to remain without a job longer than they would if they had to pay for the cost of remaining unemployed for a longer time. Use of a TERA instead of UI increases the price for additional unemployment (at least among those who do not expect to retire with an unpaid loan), since TERA withdrawals would be expected to be repaid from future income.

Several studies have attempted to estimate how unemployment benefits affect the duration of unemployment. In one survey of the evidence, Krueger and Meyer (2002) conclude that UI tends to increase the amount of time in-

dividuals spend out of work, with elimination of benefits projected to cut unemployment duration in half. In the TERA proposal, however, the payments received during a period of unemployment are not eliminated—they just need to be repaid. If UI were eliminated but income held constant, as would be the case if benefits during a period of unemployment need to repaid with interest, then the estimated duration of unemployment would fall by 15 percent, based on research by Chetty (2004, 2006).

However, if individuals worry little about the future repayment to a TERA, then the effect of TERAs may be relatively small. Other psychological factors may also come into play. For example, people may find it harder to borrow $100 of unemployment assistance than to borrow additional funds that raise their accumulated total from $900 to $1,000; this could make the perceived rewards of reemployment strongest at the beginning of an unemployment spell. Moreover, some of the people with TERAs would be close to retirement, and thus may not need to repay their loans. Taking these factors together, it seems reasonable to estimate that the introduction of TERAs would reduce the overall duration of unemployment by 5 to 10 percent—depending, of course, on whether the job market is strong or the economy is in a recession.

Wage-loss insurance would also affect duration of unemployment. Individuals considering a job offering a wage below their insured wage level would be more likely to accept it, since the hourly rate of pay would be augmented by wage-loss insurance payments. The availability of wage-loss insurance makes work at least as attractive as, and sometimes relatively more attractive than, unemployment would be under the current UI system.

There is no direct evidence about how much wage insurance might reduce the duration of unemployment, but indirect evidence available from reemployment bonus experiments and the Canadian ESP suggests that financial incentives can modestly reduce the duration of unemployment. A reemployment bonus is a policy in which unemployed workers receive a lump-sum payment if they find a new job relatively soon. State-level experiments with this idea showed large effects in reducing the duration of unemployment in Illinois, but these effects were not replicated in Pennsylvania and New Jersey (Meyer 1995, Robins and Spiegelman 2001). In Canada's ESP, the full-time employment rate of the group offered earnings insurance was 42 percent six months after job loss, versus 38 percent for the comparison group (Bloom et al. 1999). ESP's eligibility requirement of finding a new full-time job within 26 weeks in order to obtain earnings insurance provided stronger incentives to find a job quickly (and to potentially take a lower wage job) than would the current proposal.

There is a tendency to conclude that a shorter duration of unemployment must always be beneficial, both for the individual and for society, but this conclusion should not be embraced too rapidly. Wage-loss insurance encourages individuals to take a job sooner, but at lower wages (Davidson and Woodbury 2000). Unemployed individuals need to strike a balance in how long they wait before accepting a job. If unemployed workers take the first job that comes along at a very low wage, then both the worker and society may be worse off than if the worker had waited for a job match where productivity and wages would be higher. On the other hand, if unemployed workers wait too long, hoping for a job with high wages that never arrives, then both the worker and society can be worse off.

Does wage-loss insurance reduce the duration of unemployment by causing workers to take jobs with reduced wages too rapidly, rather than waiting for a more productive job match that would be better for the worker and for economic output? Evidence and intuition suggest that that if wage-loss insurance does lead to lower wages than a worker would otherwise accept, the effect isn't a large one.

First, some empirical studies have explored whether higher unemployment benefits are linked to eventually taking a job with higher wages, but the evidence on the size of this effect is mixed (Addison and Blackburn 2000, Gangl 2004, Centeno 2004). If current unemployment benefits have only a minor effect on the wages and other qualities of the job eventually accepted, then the new unemployment policies proposed here seem likely to have only a minor effect, as well.

Second, at an intuitive level, it makes sense that, for many workers, the size of unemployment benefits might not have much effect on the wages of their new job. After all, for some people the duration of their unemployment may be largely based on a decision about taking some time off from work before returning to employment, rather than on seeking a higher wage. For others, the wage offers received while searching for a job may all be similar, so a longer duration of unemployment won't much change the eventual wage the employee receives. In these cases, either current UI or proposals such as TERAs and wage-loss insurance would have little effect on the characteristics of future jobs.

Third, it appears that while searching for a new job the unemployed place emphasis not only on the current market valuation of their skills, but also on how wage offers compare to their previous hourly wages. This is perhaps based on a perception of fairness relative to reference transactions of wages they have observed in the past (Ball and Moffitt 2001, Hogan 2004). For individuals who would ultimately receive wage-loss insurance, the offers are lower than their previous wage. The availability of wage-loss insurance may help people more quickly accept the reality of the prevailing market wages and help avoid prolonged unemployment that can further depress wage offers, such as when longer duration is perceived as a negative signal by employers, when individuals become discouraged and reduce search effort, or when their skills deteriorate.

Fourth, how people alter their work choices in response to changes in tax rates provides some evidence as to how they alter those same choices in response to wage-loss insurance. In the wage-loss insurance proposed here, each additional dollar in higher hourly wages (as long as the new wage remains below the previous wage) reduces the wage-loss insurance payment by 25 cents. To the worker, the impact is similar to a 25 percent tax on additions to the hourly wage. However, since the wage-loss insurance is calculated based on hourly wages, there is no reduction in the benefits if additional hours are worked, only if the wage in the new job rises closer to the wage from the previous job. Existing evidence indicates little responsiveness of either hours worked or wages to changes in marginal tax rates for those earning between $10,000 and $50,000—which overlaps the group that would be affected by the wage-loss insurance (Gruber and Saez 2002). A provision of the tax code called the Earned Income Tax Credit (EITC) provides a subsidy to wages. For example, in 2003 a family with two children received a 40 percent tax EITC for all income earned up to $10,510, for a total possible credit of $4,204. This tax credit wasn't reduced as income climbed to $13,730, but was then phased out at a rate of 21.06 percent for every additional dollar earned up to $33,692 (U.S. Congress 2004). These different tax rates, and how the EITC legislation has changed over time, again offer an opportunity to observe how individuals in the income range affected by wage-loss insurance reacted to changes in tax policy. There is little responsiveness of hours of work for married men or single women in the range where the EITC is being phased out, and there is a high marginal benefit reduction rate and some responsiveness of married women (Eissa and Hoynes forthcoming). Taken together, the low responsiveness of income and hours to changes in tax rates implies a low responsiveness of wages, as well.

Results from experiments in the 1970s suggest that simple (and very large) changes in marginal tax rates do cause people to adjust their hours of work, but there is again little evidence that they adjust their wages (Burtless 1987). Setting the replacement rate for wage losses to a relatively low rate (25 percent) in combination with a relatively long duration for benefits is intended to make this rate a less salient feature of decision making than in contexts such as the negative income tax experiments or the Canadian ESP, while still providing substantial payments to those experiencing wage losses.

Overall, the evidence suggests that while people may adjust their hours worked in response to changes in unemployment benefits or to changes in the marginal amount of each dollar earned that they are allowed to keep, they do not respond by accepting jobs with lower wages. Remember, the wage-loss insurance proposed here is based on a gap between hourly earnings in the previous job and hourly earnings in the new job. It is not based on total

income earned during some previous period. Wage-loss insurance designed in this way provides no incentive to work fewer hours.

The available evidence clearly predicts that employment rates with a combination of TERAs and wage-loss insurance would be at least as high or higher than under traditional UI. TERAs offer rewards for ending unemployment spells sooner that are at least as large as or larger than the rewards with UI. The availability of wage-loss insurance unambiguously increases employment rates because it does not affect hourly wages if they are above the insured wage and it provides higher wages below the insured level.

Work on the New Job

Once an individual accepts a new job, take-home pay would be affected in the short term by whether she contributes to a TERA and by the wage rate on her new job. Repayments of borrowed funds would be mandatory. If the balance in the TERA were positive, the automatic default would be a payroll deduction for savings, and individuals could opt out of this voluntary saving. The experience of firms with 401(k) savings plans indicates that makings savings the default has a large impact on decisions, even when opting out is as simple as checking a box on a form to decline to participate. For example, the introduction of automatic enrollment at a Fortune 500 firm increased initial 401(k) participation from 37 percent to 86 percent (Madrian and Shea 2001). If an individual accepts a job at a lower hourly wage than the previous job, then she can benefit from wage-loss insurance. As described earlier, the wage-loss insurance would first go into the TERA—building savings or speeding repayment of borrowed funds. After the TERA has reached its maximum balance of $5,000, wage-loss insurance payments would be made directly to the employee, increasing her net take-home pay.

In making choices about hours of work on the new job (and adjusting these hours), a majority of the previously unemployed would find that the proposals for TERAs and wage-loss insurance promote work. In particular, for those who made no TERA withdrawals and whose wages are below their insured wage, additional hours of work become more attractive than they would be under existing UI because of the payout from wage-loss insurance, and they would tend to have higher hours of work. However, different groups of individuals would be affected in various ways relative to their circumstances under UI. Those who do not borrow from a TERA during their period of unemployment and who are earning a higher wage in their new job (or a wage higher than the $15 an hour cap) would see no difference in their incentive about how many hours to work in the new job.

Those who borrow from a TERA and find a new job that pays more than their previous job, or whose TERA balance is small enough that they expect to pay it back from payroll deductions in the future, respond in essentially the same way as those who did not borrow from a TERA. Indeed, if someone borrowed from a TERA and did not receive wage-loss insurance payments, then she would have lower lifetime income relative to what she would have had under current UI (in which she need not repay unemployment benefits received), which could lead to increased hours worked on the new job.

For those who borrow enough through their TERA that they do not expect to pay it back, payroll deductions for TERA repayment would continue until retirement; individuals would respond as if these deductions were an additional payroll tax. Higher payroll taxes tend to reduce hours of work among married women, with little effect on married men or single adults (Triest 1992, Meyer 2002).

The existence of wage-loss insurance can also have an effect on the attractiveness of promotions or on considerations of changing jobs. Here, some of the same factors that influenced the reemployment decision are again important. Individuals whose average wage since reemployment is below their previous wage and who are thus eligible for wage-loss insurance would see their payments under that insurance reduced by 25 cents for each dollar increase in wage from a promotion or new job. This effect would dampen the incentive to pursue wage increases, in exactly the same manner that other taxes discourage pursuit of a higher income.

In general, individuals who have short unemployment spells and wage losses would be better off under this proposal, while those with long unemployment spells but who earn high wages on their new jobs would be better off under the current UI system. Yet, those who have high wages in their next job are in some sense the least needy of the unemployed. The combination of TERAs and wage-loss insurance effectively transfers some benefits that would go in the current system to UI recipients who experience wage gains or who have high wages on their new jobs to those who experience long-term wage losses even after they find another job. One implication of this pattern is that older workers would benefit more: Younger workers generally have higher wage growth; that is, their wages in a new job are more likely eventually to exceed their previous wage. Older workers are less likely to see their wages grow rapidly over time, which means that they are more likely to end up using wage-loss insurance. This outcome is consistent with the intention of insuring against absolute wage losses.

The fact that the population served by wage-loss insurance payments would be a small fraction of the labor market has another implication. Large programs such as Medicaid or Medicare can shift the entire market they are serving, sometimes in a way that counteracts the intent of the program. For example, Medicare and Medicaid are intended to help the elderly and the poor receive medical care, but they also contribute to driving up the cost of such care, making it harder for the elderly and poor to afford. Similarly, a universal wage subsidy to all workers could cause employers to offer lower wages, thus counterbalancing some of the intended effect of the wage subsidy. However, wage-loss insurance offered only to the unemployed is unlikely to affect the market wages offered to all employees. Thus, the intended recipients of wage-loss insurance should be able to receive the insurance payments without unintended consequences from the market affecting wages overall, or without unintended consequences on the new job in particular.

Some proposals to insure workers against a reduction in earnings are restricted to those who accept a period of full-time work. This restriction is to avoid the need to make large payments to those who experience a large drop in income because they are moving from a full-time job to take a new job working fewer hours. The proposal for wage-loss insurance in this paper is designed so that the duration of the assistance is based on the number of hours worked in the two years prior to job loss. This rule has the desirable property of treating part-time and part-year workers fairly.

VI. Implementation Issues

How would the transition to the proposed system work?

The transition to a system of TERAs and wage-loss insurance would phase in naturally. In the first year of the program, firms would be charged the full amount of withdrawals by their former employees from TERAs because the former employees would initially have no savings and the system would need funds to loan out from TERAs. Wage-loss insurance payments would not be paid in the first year, however, so total outlays by firms would not increase.

In the second year of the program, some workers would begin to qualify for wage-loss insurance and firms would begin to make wage-loss insurance reimbursement payments to the government. The parameters of the system could be set so that the combined cost to firms for TERA withdrawals and wage-loss insurance payments would be no larger than the firms' costs under the current UI system.

The proposal could be adopted by one or more states, while other states could opt to remain with the existing system. Coverage for compensation after involuntary job loss would be determined by the location of the employing establishment at the time of job loss, just as under the traditional UI system. Individuals who worked in a state adopting this proposal would be covered under it even if they relocated to a state that had not adopted this proposal.

Would administrative problems arise in using data on hours worked?

The proposal for wage-loss insurance relies on information about hours worked and hourly wages paid at the previous job and at the new job. Implementation would require many states to start collecting data in a systematic way on hours worked. There are two reasons for using data based on hours. First, work during part of the year or part-time work during a week are incorporated into the system in a clear, fair, and straightforward way: Additional hours worked in the year prior to job loss increases the number of hours covered by wage-loss insurance on reemployment. Second, using hourly wages rather than earnings as a basis for payments does not create incentives for working fewer hours on the new job. The evidence (as discussed in Section V) indicates that people respond more to incentives to decrease hours worked than to incentives to seek lower hourly wages, perhaps because an individual's hourly wage affects self-worth and social status as well as income.

It is often argued that it is preferable to base a system on total earnings (for example, Carcagno and Corson 1982). This argument has become less compelling over time, because information on hours is commonly available now in most firm payroll systems, and it would be straightforward to use these data in an overhauled social insurance system for dealing with the costs of unemployment. On closer inspection, it is often straightforward to report hours worked and average hourly wages. In 1995, Oregon justified collection of hours data for UI eligibility partly based on employer feedback that reporting hours would be much simpler than reporting weeks of work, as was previously required (Chute 1995).

A number of public programs already collect data on hours worked because the programs base their eligibility on a minimum of hours worked. For example, Oregon (500 hours a year) and Washington (680 hours a year) allow eligibility for UI to be satisfied with a minimum number of hours worked. Both states collect information on total hours worked in each calendar quarter for every employee in the state. Minnesota also collects hours data, although these data are currently used for research rather than for program eligibility. All three states have the information systems infrastructure in place to administer a program based on hourly wages.

Other countries run programs that rely on data on hours worked as well. The United Kingdom's Working Tax Credit can be claimed by those who report they are

working at least 16 hours per week, with a more generous credit for those working more than 30 hours per week. In this program, the claimant reports hours worked and can be audited, but the data are not systematically reported by employers.

Numerous demonstration programs have incorporated thresholds of minimum hours. Canada's ESP (for displaced workers) and Self-Sufficiency Project (for low-income parents) both target earnings supplements to those working at least 30 hours per week. The New Hope project in Milwaukee also required 30 hours per week of work for an employee to become eligible for an earnings supplement. The ATAA discussed earlier requires full-time work (as defined by one's state of residence) for earnings supplements to be paid. For all these demonstrations, hours were generally verified by having individuals submit copies of their pay stubs to the program; additional information was requested or employers contacted in cases where the stub was insufficient.

How easy would it be to game the system?

When payments to the unemployed are based on duration of unemployment, it is fairly easy to game the system: Simply collect unemployment benefits while working off the books. But since TERA withdrawals either use one's own savings or are loans that must be repaid with interest, an individual gains no advantage by running up larger loans. Focusing the wage-loss insurance system on hourly wages also makes it more difficult to game the system and to extract extra payments.

Imagine, for example, that when a formerly employed worker takes a new job, the worker and the employer agree to a job with relatively low wages and higher nonwage compensation, planning to take advantage of wage-loss insurance. Alternatively, a firm and an employee might agree to report that the employee is working long hours for a low hourly wage, when the truth is that she is working shorter hours for a higher hourly wage. Such a strategy could benefit the employee, by giving her higher wage-loss insurance payments. The strategy could also protect the firm, since the chance of that employee becoming unemployed and taking a job with a still lower wage—and thus making the firm responsible for future wage-loss insurance payments—would be reduced. But attempting to take advantage of wage-loss insurance in these ways certainly requires more effort than an individual extending the duration of current UI benefits by not looking very aggressively for a new job.

If firms inflate reported hours in the hope of reducing future wage-loss insurance payments, this would be against the long-term interests of the employee who might want to be protected against a genuine wage cut in the future. Such a strategy would be easily observed by the employee and fairly easily investigated by the government on request. Wages below the natural floor of the minimum wage would be especially suspicious. Firms inflating hours would also be increasing the potential duration of benefits that the firm would need to pay. If a common level of hours inflation did set in over time among all firms in an industry, then the previous job's wages and the new job's wages would be lower, duration of benefits would be longer, and more employees would be below the maximum insured wage—actually increasing insurance payments and giving incentive to the industry to police itself. Overall, firms that might be tempted to game the wage-loss insurance system would need to engage in a type of fraud that would have fairly low payoff but would likely be observed by numerous people in the firm and would be relatively easy to investigate—all of which reduces its appeal.

What if firms don't pay their wage-loss insurance reimbursements?

Firms would be required to purchase third-party insurance for reimbursement of wage-loss insurance claims in the event that the firm becomes insolvent. Use of private insurers would allow establishment of a market for assessing the risk of insolvency and the costs of wage-loss insurance claims. While private insurers are likely to balk at assuming the risks of individual layoffs, which are at the firm's discretion, general insolvency would take place only in special and well-defined cases where wage-loss insurance costs are likely to play a minor role in firm decisions. Insurers could hedge macroeconomic risks of recessions with economic derivatives (Baron and Lange 2003).

If firms do not have adequate insurance or do not repay the government for wage-loss insurance claims, current law contains a mechanism that could be used for collecting the money. Under current UI law, firms technically owe a federal unemployment tax of 6.2 percent of the first $7,000 paid annually to each employee. However, current law also allows the federal unemployment tax to be imposed only at a rate of 0.8 percent if the state has an approved UI program—and all 50 states have such a program. These funds are used for federal administrative costs related to UI and for funding half the cost of extending unemployment benefits from 26 to 39 weeks in states that experience high levels of unemployment.

Any firm that does not make its required payments under the new proposal could be required to pay the full 6.2 percent on the first $7,000 of earnings paid to each employee, until what the firm owed was repaid. This mechanism implicitly provides an annual maximum that small firms would need to contribute in the event of a wage-loss insurance claim by a former employee. For example, a firm with four employees that laid one worker off would pay a maximum of $1,302 in taxes to the government in the following year if the firm did not fully reimburse the government for costs of a wage-loss insurance claim.

What would happen to TERAs at retirement, death, or divorce?

On retirement, a positive TERA balance would be converted to an IRA. Once an individual has elected retirement and that person's TERA has been converted to an IRA, that individual would no longer be eligible for unemployment compensation. On the death of the individual, a positive TERA balance would be transferred to the TERA of a spouse; if there were no living spouse, any positive TERA balance would be transferred to the TERA of a designated beneficiary. On divorce, a fraction of the TERA balance could be transferred to a spouse under a divorce agreement, as is currently the case with IRAs.

Could the proposal be combined with other social insurance policies?

The proposal in this paper has assumed that levels of unemployment payments, eligibility for such payments, and many other features of the current UI system remain unchanged. But the proposal described in this paper could be readily adapted to changes in a number of ways. For example, if proposals for TERAs and wage-loss insurance were debated in Congress, other issues related to UI would naturally arise for reconsideration, including whether TERA loans should be the same size and of the same duration as current UI benefits.

The discussion has also assumed that other social insurance programs remain unchanged. However, the scope of insurable events in this kind of proposal could be broadened beyond wage-loss insurance and income support for unemployment spells to encompass missed work from injury or sickness. In addition to UI, income support is currently provided by workers' compensation and by temporary disability insurance. Temporary disability insurance programs provide wage replacement for non-work-connected sickness or injury in California, Hawaii, New Jersey, New York, Puerto Rico, and Rhode Island. Moreover, many states have a type of wage-loss insurance for individuals injured on the job. For example, some jurisdictions use a wage-loss approach that bases compensation for disability on the differences between the pre- and postinjury earnings, while others use a loss-of-wage or earnings-capacity approach, projecting future earnings loss based on age, education, labor market conditions, and degree of impairment (Barth and Niss 1999). For an example of an integrated proposal that would include unemployment, injury, and sickness, Fölster (1997, 2001) discusses how a social insurance savings account with multiple insurable events—sickness, voluntary and involuntary unemployment, parental leave, and tertiary education—could work in Sweden. An integrated system for insuring against involuntary job loss, sickness, and disability would obtain some of the benefits emphasized by Orszag et al. (1999) and Stiglitz and Yun (2005) of pooling risks for diverse events of injuries and unemployment that are not highly correlated. Broadening the coverage of insurable events could be complemented by shifting the entire system to a common system of financing structured as a mandated benefit.

VII. Conclusion

This paper has described a proposal to replace the current UI system with a system of wage-loss insurance and TERAs. This reform would be a fundamental shift toward insurance for persistent, long-term effects of job loss. The core principle is that smaller, short-term needs can be met through savings, borrowing, and repayment, so that the funds for insurance can be targeted to assist those facing larger, longer-term losses.

Two-thirds of the financial resources currently used for UI (over $20 billion at 2005 expenditure levels) would be shifted to wage-loss insurance to augment the hourly wages of individuals who find new jobs at wages lower than their previous jobs. TERAs would provide the same amount of cash as under UI to be withdrawn during unemployment. Unemployment would be reduced by removing subsidies for temporary layoffs and by creating stronger incentives to return to work. The proposed system would provide a significantly greater share of net program benefits to workers in the lower half of the income distribution when compared to the current system of UI benefits alone. By targeting system resources to those whose hourly wages are lower on their new jobs after an involuntary job loss, significant hardship would be reduced.

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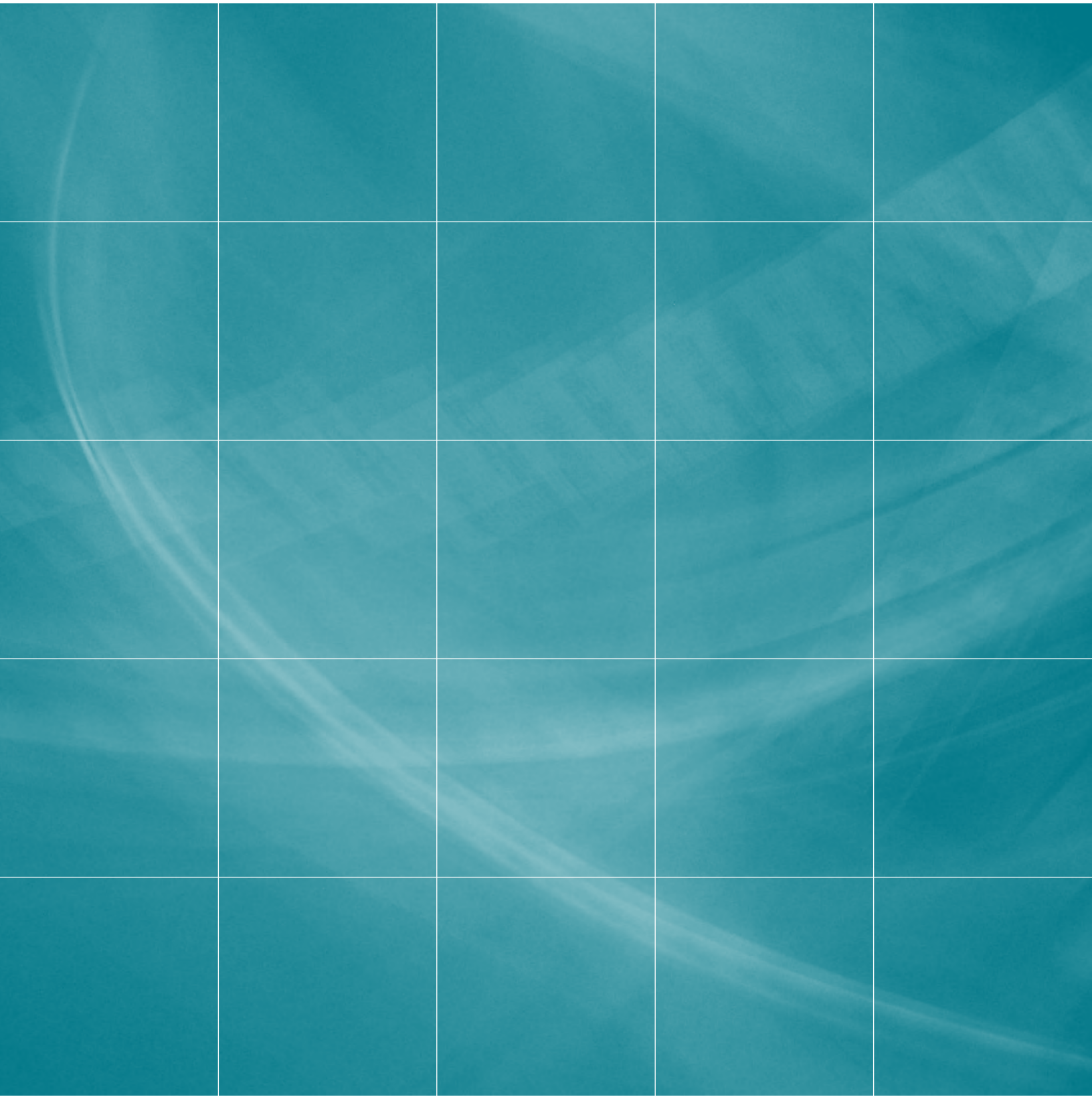

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