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HUNGARIAN PENSION REFORM

Eugene Golant



Introduction

The world's first state social insurance program was created in 1889 after Emperor William I of Germany wrote to Parliament that "those who are disabled from work by age and invalidity have a well-grounded claim to care from the state." ("The German Precedent") This system was designed to safeguard the relatively low number of elderly people in German society against poverty due to old age. However, throughout the twentieth century many European countries have instituted state pension systems that are intended to provide generous retirement income for large groups of people. These systems are generally funded on a pay-as-you-go (PAYG) basis where retirement benefits for the elderly are, for the most part, paid by taxing the current working population. As highlighted in previous issues of *Perspectives*, these PAYG schemes have increasingly become unsustainable as unfavorable demographic changes have raised the proportion of elderly supported by the workforce contributions. (Blair; Glassman)

In the 1990s pension reform became a pressing issue for Eastern European countries moving from communism to capitalism. These states must not only solve the funding problems caused by demographic trends, but must also deal effectively with problems caused by prolonged communist rule, such as the use of retirement and pensions as a method to mask unemployment. They must do this with fewer resources than most Western countries and must undergo this transition while pursuing EU ascension and coping with the challenges of globalization. In 1998 Hungary became the first European post-communist nation to restructure its state pension system. (Palacios and Rocha, p. 1)

In this article I first describe the main attributes of both the pre- and post-reform pension systems in Hungary. I then define the measures of a successful pension system — adequacy and financial sustainability — and evaluate the reformed pension system using these criteria. Finally I draw conclusions as to the success of the reforms, and also identify possible measures to further improve the system.

The Hungarian Pension System: Pre-Reform

The Austro-Hungarian Empire was significantly influenced by Prussian values and the policies of Bismarck. In this tradition Hungary established a fully-funded defined-benefit state pension system in 1929. (“Information: The Statutory...”) However, the system collapsed as a result of the economic devastation caused by World War II in conjunction with a period of hyperinflation. After the communists solidified power in 1948, a state PAYG pension system was introduced. Under this system, pension eligibility was based on employment, and pension levels depended on the number of years of work. By 1970 the system had expanded to include almost every Hungarian and encompassed survivor’s and disability benefits as well. In the process, fiscal pressure began to build.

From 1975 until 1990, the dependency ratio¹ increased rapidly due largely to the growing proportion of women pensioners who were allowed a lower retirement age and had a longer life expectancy. The average replacement rate² also increased steadily as a result of permissive eligibility rules and generous benefits. Men could retire at 60 and women at 55, and both were eligible for full benefits at any age after twenty years of contributions. These factors, coupled with rising wages, led to a sharp increase in pension expenditures from 3.5 percent of GDP in 1970 to 10 percent of GDP in 1990, a level that clearly could not be maintained. (“Hungary: Health and Welfare”)

The Hungarian Pension System: Post-Reform

Reform of the pension system began slowly in the 1990s, but the pace picked up with the election of the Socialist Party in 1994. The

Socialist Party formed a coalition with the Free Democrats and made it its mission to institute a set of economic stabilization programs called “The Bokros³ Package.” Pension reform was viewed as a means for curbing public spending. Finance Minister Bokros, the author of the reforms, argued for a complete dismantlement of the PAYG system in favor of a funded system. However, he was overruled by others in the government who favored an integrated “three-pillar” system of the type advocated by the World Bank for all post-communist countries. The pillars of the new state pension system would consist of an unfunded PAYG pillar (I), a mandatory funded pillar (II), and a voluntary funded pillar (III). The existing PAYG system was also overhauled in order to preserve the benefits of those who had already earned them under the old system.⁴ (Réti) In this article I discuss only the first two pillars, and not the third pillar which is voluntary and dependent upon individuals’ saving.

I first briefly consider the differences between the old and the reformed PAYG systems as summarized in Table 1. As shown in lines 2 and 3 of Table 1, eligibility criteria were significantly tightened in the reformed PAYG system. The number of years necessary to qualify for benefits without penalty was raised. Penalties for early retirement and benefits for later retirement were also increased, thus minimizing the incentive for early retirement and increasing the contributor base.⁵ The former wage indexation⁶ of pension benefits was also phased out and replaced by a “Swiss” indexation⁷ formula (line 4). The introduction of the Swiss formula reduces the potential benefit paid out because wages tend to rise more quickly than prices in a healthy economy. Projections

³Dr. Lajos Bokros was Minister of Finance from 1995 until 1996. He is responsible for imposing controversial austerity measures while in office.

⁴Contributors had the choice of staying in the reformed PAYG system or switching to the new mixed system. This choice remained open until 1999, and those who switched to the new system could switch back until 2002 after which time the worker was permanently affiliated with a pension system. All new employees entering the system after July 1998 were automatically enrolled in the new system. The reformed PAYG system will be phased out completely by about 2050 when the last of its participants has retired.

¹The dependency ratio is the ratio of retirees receiving benefits to workers paying for these retirees.

²The replacement rate is the ratio of pension benefits to income. It is commonly accepted that a replacement rate of 60 percent will allow the retiree to maintain his or her standard of living. The method used to calculate income also determines the size of pension benefits and will be discussed later in this article.

Table 1
Features of the PAYG Systems Compared

		Unfunded Systems	
		Old	Reformed
1	Contribution Rate	30% of gross wage	26% of gross wage
2	Normal Retirement Age	60 (men); 55 (women)	62
3	Early Retirement Rules	Low penalty rates and a minimum of 20 years of service	Higher penalty rates and a minimum of 40 years of service
4	Indexation of Pensions (to keep up with increases in costs of living)	Net wage indexation	Swiss indexation
5	Pension Base	Average lifetime earnings, partially indexed	Average lifetime earnings, partially indexed
6	Scale Rate (earned per year of contributions)	Varies each year; the average is 2% of net wage per year	Constant 1.65% of gross wage per year
7	Benefit Calculation	Starting pension = line 5 times line 6	Starting pension = line 5 times line 6

Source: Feldstein and Siebert, p. 372.

indicate that average pensions will fall relative to average income per capita due to the Swiss indexation system.⁸ (Orban and Palotai, p. 18)

Workers deciding to remain in the reformed system pay a contribution rate of 26 percent⁹ of their gross wages and earn a scale rate¹⁰ of 1.65 percent per year for each year of

⁵The contributor base is the population that is working and paying into the system.

⁶Indexation is the rate at which pension benefits rise every year in order to maintain the standard of living of the retiree. Wage indexation bases this growth on wage growth. This type of indexation is more generous than indexing based on price levels (as measured by the Consumer Price Index).

⁷Swiss indexation increases existing pensions at a rate of 50 percent of average wage increase and 50 percent of consumer price increases over the prior year.

⁸As part of the new tax code, pension benefits will be taxed and indexation will occur on a gross wage basis. The average pre-tax lifetime earnings (gross wages) will be considered in the calculation for pension base which yields a higher average wage. Pension benefits will be taxed once paid to the retiree. This will lower the average pension by an estimated 10.5 percent. (Marin, Stefanits, and Tarcali)

⁹This table is based on a contribution rate of 8 percent contributed by the employee and 18 percent by the employer.

¹⁰This is the percentage of average lifetime earnings to which the worker becomes entitled for every year of work.

service (lines 1 and 6). These changes influence the final benefit calculation on line 7 and will result in lower payments to pensioners as compared to those of the pre-reform system.

Next I turn to the new partially funded system and its attributes, as can be seen in Table 2. Workers opting to switch to the new system and those entering the work force for the first time must contribute to the two mandatory pillars. The first pillar has the same attributes as the reformed PAYG system shown in Table 1. The second pillar accounts are managed by non-profit organizations called PPIs (private pension institutions). These institutions may be established by employers, by trade unions, or by voluntary pension funds in order to accept and invest second pillar funds. The institution purchases annuities payable to the participating retirees.

Workers joining the new system pay 22 percent to the PAYG pillar and 8 percent to the funded pillar. The PAYG pillar yields a scale rate of 1.22 percent per year for every year of contributions, including the years before the switch. The scale rate is proportionally lower than that of the pure PAYG system due to a lower contribution rate (lines 1 and 6).

Table 2
Old PAYG System Compared to New Multi-Pillar System

	Unfunded System		New System	
	Old	First Pillar (PAYG)	Second Pillar (Funded)	
1	Contribution Rate	30% of gross wage	22% of gross wage	8% of gross wage
2	Normal Retirement Age	60 (men); 55 (women)	62	62
3	Early Retirement Rules	Low penalty rates and a minimum of 20 years of service	Higher penalty rates and a minimum of 40 years of service	n.a.
4	Indexation of Pensions (to keep up with increases in costs of living)	Net wage indexation	Swiss indexation	n.a.
5	Pension Base	Average lifetime earnings, partially indexed	Average lifetime earnings, partially indexed	n.a.
6	Scale Rate (earned per year of contributions)	Varies each year; the average is 2% of net wage per year	Constant, 1.22% of gross wage per year	n.a.
7	Benefit Calculation	Starting pension = line 5 times line 6	Starting pension = line 5 times line 6	Annuity = Fund Deposits times Rate of Return minus Fund Fees

Source: Feldstein and Siebert, p. 372.

Though the multi-pillar scheme met with some opposition from the new government elected only six months after its enactment in mid-1997, it seems to have been successful in attracting participants. Fifty percent of the workforce has switched to the new system, and eighty percent of all workers under the age of thirty have switched. (Feldstein and Siebert)

Defining a Successful Pension

In order to assess the success of the Hungarian pension reforms, it is important to first define the goals of a pension system and establish metrics by which to measure the current system. The EU has acknowledged that the financial condition of pension systems in member states is a common problem and has thus attempted to define common goals and benchmarks for all member states. The EU Committee on Social Protection identifies adequacy and financial sustainability as the cornerstone features to which all member states'

systems should aspire. (*Quality and Viability of Pensions...*)

Adequacy Defined

The Hungarian National Strategy Report on pensions as well as EUROSTAT use the "percent of poverty risk" as a tool for measuring adequacy of pension benefits. One such measure is the percentage of pensioners whose incomes are less than 60 percent of the average discretionary income¹¹ of the nation. Though this metric is useful for evaluating the general welfare of pensioners as compared to other segments of society, it does not take into consideration the source of a pensioner's income. For example, the elderly may be obtaining jobs in order to stay above the poverty line. To better measure the adequacy of the system, I consider the average replacement rate and the index-

¹¹Discretionary income is income that is available to spend after taxes have been deducted.

ation mechanism and apply the benefit formula to hypothetical retirees in order to test adequacy of the pension system.

Adequacy: Pre-Reform

The average Hungarian pension in 2004 was HUF 57,251 per month, or around \$280. However, average figures take into account pensions accrued under the old system; thus, in order to fully understand the effects of the new system, it is important to consider a pension earned completely under the new system. (*National Strategy Report...*, pp. 8–18)

As mentioned above, the current pension formula uses average gross lifetime earnings as the base for pension benefits, multiplied by the scale rate that the worker has earned. Retirees who participate in the three-pillar system accrue 1.22 percent of their base per year. Participants solely in the reformed PAYG system accrue 1.65 percent annually.¹² This formula applies for a person retiring at 62 years of age or after 40 years of service. The formula incorporates penalties for early retirees and additional benefits for later retirees. I consider four scenarios (Cases A through D) described in Table 3 in order to see more clearly the implications of this new system.

The starting monthly pension (line 3) depends on the number of years of service and the level of average lifetime earnings. Line 6 shows the minimum subsistence level in Hungary, which is used here as the benchmark for determining adequacy. Line 7 shows the percentage of the minimum subsistence level that is provided through the pension in each of the four cases.

It is important to note that Case A, in which a person has worked for 40 years and retired at age 65, is not representative of most Hungarians. In fact, fewer than one-half of one percent of Hungarians who retired in 2004 retired at over 62 years of age. Rather, Case A is included for the sake of comparison.

¹²Thus a person who has worked for 40 years would be entitled to 48.8 percent replacement of average lifetime earnings from the first pillar plus any earnings from the second pillar account. Under the old PAYG system the same person would be entitled to 66 percent replacement.

Case B is much more representative of the Hungarian population when one considers that the average female contribution for 2004 was 32 years. Case C is also representative of a large group; about 30 percent of contributors earned the minimum wage in 2003. (*National Strategy Report...*, Appendix 4) This is an important case because it represents a group which is in great danger of post-retirement poverty. Case D shows the severe impact that a period of unemployment can have on average lifetime earnings and thus on pension benefits. Both C and D yield a pension benefit (line 3) that is below the poverty line¹³ as well as the minimum subsistence level (line 6).

A guaranteed minimum pension is provided to those who have contributed for at least 20 years. A retiree receives additional monthly payments so that the total pension minimum is HUF 24,000 per month. In light of the fact that the minimum subsistence level is about HUF 45,000 per month, this amount seems completely inadequate. (*National Strategy Report...*, pp. 9–12 and Appendix 2)¹⁴

Surprisingly, EUROSTAT reports that in 2004 the retiree poverty rate was 10 percent, which is better than the 12 percent rate for the 20–64-year-old population. This can be explained by the fact that 18 percent of total retiree income came from work. Apparently, retirees are often forced to supplement their pensions. Women over 70 are the age group that is most at risk for poverty because women

¹³The poverty line is defined as 60 percent of average net disposable income.

¹⁴It is important to note that the above cases were constructed using several macroeconomic assumptions which impact the size of the resulting benefits significantly. For example, the rate of return earned on the funded portions is assumed to be 2.5 percent. The Magyar Nemzeti Bank reports that private pension funds earned a gross return of 3.9 percent during the period after 1998. This translates to an average net return of 2.1 percent after fund fees. These rates are low by European standards due largely to the highly conservative nature of fund holdings and perhaps to a lack of competition. The market for second pillar investment funds is highly concentrated, with five large funds representing 80 percent of the total value. The Magyar Nemzeti Bank further reports that, assuming fees fall from the current 6.5 percent of contributions to 4.5 percent over the next ten years, a net return of 3.5 percent would be required to make the three-pillar system produce benefits equal to those received in the reformed PAYG. (Orban and Palotai, pp. 12–14)

Table 3*†
Projected Benefits for Hungarian Retirees

		Case A (Retires at 65 with 40 years contributed and an average salary)	Case B (Retires at 60 with 32 years contributed and an average female's salary)	Case C (Retires at 62 with 20 years contributed and minimum wage salary)	Case D (Retires at 60 with 40 years contributed with a break in employment, 150% average salary earned before break and minimum wage after break)
1	Pre-tax Monthly Earnings in 2004	HUF 154,998	HUF 121,347	HUF 53,000	HUF 53,000
2	After-tax Monthly Earnings in 2004 ¹⁵	HUF 96,858	HUF 86,156	HUF 45,845	HUF 45,845
3	Monthly Pension in 2005	HUF 82,131	HUF 59,864	HUF 24,662 ¹⁶	HUF 32,457
4	Pre-tax Replacement Rate	53.0	49.3	46.5	61.2
5	After-tax Replacement Rate	84.8	69.5	53.8	70.8
6	Minimum Subsistence Level ¹⁷	HUF 45,000	HUF 45,000	HUF 45,000	HUF 45,000
7	% of Minimum Subsistence Level	182.5%	133.0%	54.8%	72.1%

Source: *National Strategy Report on Adequate and Sustainable Pensions: Hungary*, Appendix 4.

* The standard used by the SPC and ISG (Social Protection Committee and Interim Steering Group) assumes real income will grow at a rate of 3% per year, EuroPop projections for population growth, Ministry of Finance estimates for inflation as well as a 2.5% net effective return on individual funds.

† Further assumptions: GDP growth: 2.7%, wage growth: 3.0%, inflation rate: 3.0%, demographics: -.3% population growth, life expectancy increase: from 65.1 to 76.4 (male), from 74.6 to 84.5 (female).

have longer expected life spans and also have higher unemployment rates than men.

Some scholars suggest that a replacement rate of 66 percent is the minimum replacement rate necessary to maintain a standard of living after retirement. Line 5 of Table 3 suggests that a replacement rate of 66 percent can be rea-

sonably expected for Cases A, B, and D or for a person who has contributed for close to 40 years. The table also shows that pensions will be modestly above the minimum subsistence level as long as the base earnings are around the national average and the retiree has not experienced periods of unemployment. Though the pension system provides an adequate benefit for those earning an average salary, it seems to fail to provide adequately for workers whose earnings are around the minimum wage for the duration of their contribution period. It also seems clear that the reformed pension system tracks the economy closely and offers little social protection from low wages or unemploy-

¹⁵This is an assumed tax rate. Hungary has two tax brackets: 18 percent for up to HUF 1.5M annual earnings, 38 percent for anything exceeding this amount.

¹⁶Averages are based on yearly minimum wage for 9 years from 1997 when the averaging system was adopted.

¹⁷Defined by the CANPI (Central Administration of the National Pension Insurance) and set at HUF 45,000 for 2003 for single retiree.

Table 4
Revenues, Expenditures, and Balance of the Hungarian PAYG System,
1991–99 (Percent of GDP)

	1991	1995	1996	1997	1998	1999
Contribution Revenues	11.0	8.9	8.4	8.3	8.2	7.8
Pension Expenditures	10.5	9.1	8.5	8.3	8.7	8.8
PAYG balance	0.5	-0.2	-0.1	0.0	-0.5	-1.0
Revenue loss to fund second pillar	–	–	–	–	0.3	0.6
Pure PAYG balance	0.5	-0.2	-0.1	0.0	-0.2	-0.4

Source: Feldstein and Siebert, p. 374.

ment. Much like during prior regimes, retirees still seem to be at a high risk for poverty based on pension benefits. Moreover, projections show that in 2050 the value of pension benefits will fall due to Swiss indexation.

Financial Sustainability Defined

As mentioned above, adequacy is only one measure of a pension system's success. I now consider the financial sustainability of the new system. Financial sustainability means a pension system's ability to provide an adequate retirement benefit for the long-term by maintaining a balance between contributions and benefit expenditure. Pension contributions are paid by insured workers as well as by employers. Raising the level of employment and eliminating disincentives to work raise the level of contributions and help to ensure the sustainability of the system. Lowering the benefits provided by the system by adjusting the indexing of pensions or changing the qualifying criteria would also help to achieve sustainability, but may violate the goal of adequacy. Increased sustainability can also be attained by improving the efficiency of pension fund management by cutting costs, increasing oversight, and reducing the public debt. ("Hungary: Health and Welfare") Sustainability can also be increased by reducing the size of the underground economy, which results in an increase in tax contributions to the system.

When setting contribution and benefit rates, it is important to balance the interests of retirees, workers, and taxpayers. A successful

system must avoid large deficits which are funded from the central budget.¹⁸ But this must be achieved while limiting both the contribution rates of workers as well as the cost of these plans. Unfortunately, it is currently projected that adverse demographic changes over the coming decades will exert increasing financial pressure on Hungarian and other European pension systems. ("Commission Proposes to Formalize...")

Financial Sustainability: Pre-Reform

During the first half of the 1990s, the pension system came under pressure as contributions dropped rapidly and the dependency ratio increased. Though PAYG deficits reached 1 percent of GDP in 1999, some of this was attributable to revenue lost from those switching to the funded pillar; thus the pure PAYG deficit was only around .4 percent. Table 4 illustrates that between 1991 and 1999 revenues decreased more quickly than expenditures, thus producing a rising fund deficit and an alarming trend. The sharp rise in unemployment (11.5 percent in 1993) caused by the introduction of market economics lowered the number of contributors. (Feldstein and Siebert, p. 378) The problem was exasperated by increasing evasion of the extremely high payroll tax. Insignificant penalties for early retirement were used to control

¹⁸The Maastricht Treaty and the Sustainable Growth Pact are the cornerstone agreements of the Euro Zone and stipulate limits on member states' total debt and yearly deficits. The deficit may not be higher than 3 percent of GDP.

unemployment and thus increased the number of beneficiaries, raising the dependency ratio from 51.4 percent in 1989 to 83.9 percent in 1996.

The threat of large deficits, however, was offset by a fall in benefit payouts during the period. This fall was caused chiefly by high inflation, which produced a 15 percent real wage decrease from 1995–1996. (Feldstein and Siebert, p. 377) Despite these mitigating factors, the fund had a deficit equal to 0.4 percent of GDP in 1999, while longer projections predicted unmanageable deficits in the future. It is anticipated that the PAYG system will produce a deficit equal to 2.0 percent of GDP at the end of 2010 and will level off at about 6.5 percent of GDP in 2070. (Feldstein and Siebert, p. 377)

Financial Sustainability: Post-Reform

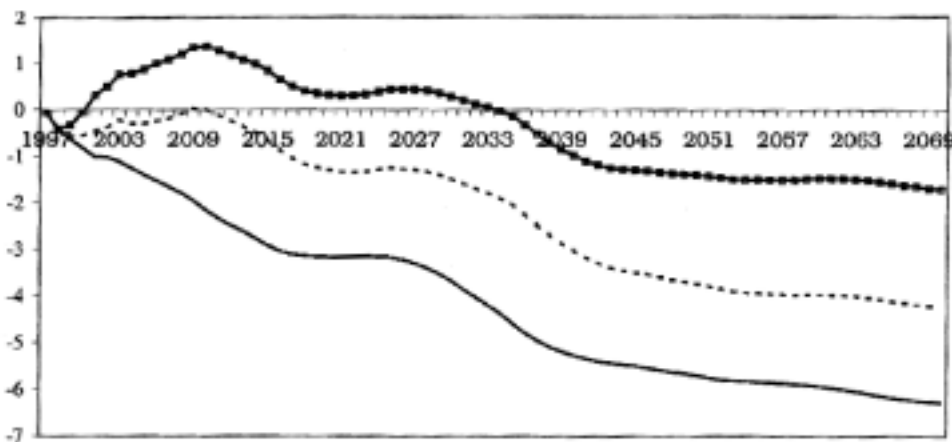
At present a significant government contribution is needed to cover the Hungarian Pension Insurance Fund deficit. In 2004 total expenditures on pension benefits amounted to HUF 1,925 billion, or 9.52 percent of GDP. In order to understand the effects and future prospects of the new system, it is important to distinguish the separate impact of reforming

the PAYG system from that of the introduction of the funded pillar. Figure 1 shows the impact of the retirement age increase as well as the change in indexation and is based on the same macroeconomic assumptions listed in the previous section.

As shown in the figure, stricter minimum age requirements, increased early retirement penalties, and increased minimum contribution years necessary to retire greatly reduce projected deficits. Reasonable projections suggest an increase in the average retirement age for men and women of two and five years, respectively. Although a greater number of years of work raises benefit levels, the net effect is an average annual reduction in future deficits of about 1.5–2.0 percent of GDP, as seen in Figure 1.

The addition of the Swiss indexation method will push the reformed system (retirement age increase + Swiss indexation) into surplus through 2033. Figure 1 shows the surplus peaking around 2010, which is when the Hungarian baby boomers begin to retire. The dependency ratio will hover around 38 percent until 2020, when the retirement wave will add 300,000 retirees to the system, after which time the ratio degenerates quickly. This will lead to large expenditure growth, as well as to a return

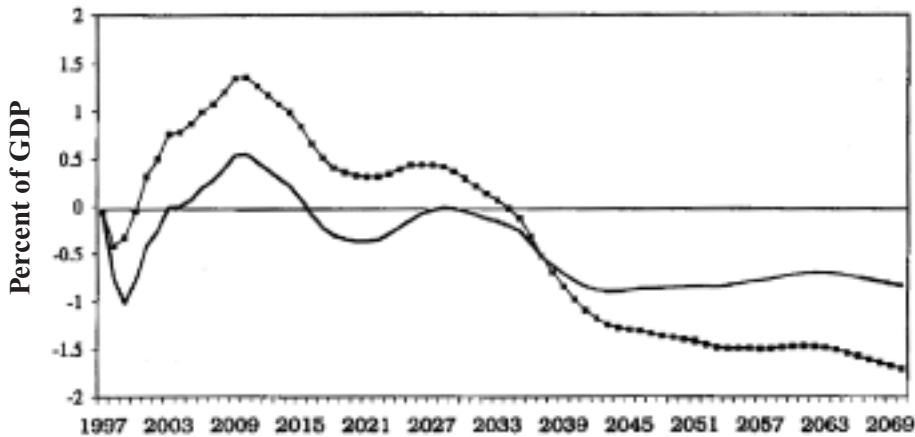
Figure 1
Comparison of Deficits Generated by the Pension System as Percent of GDP



Sources: Feldstein and Siebert, p. 374.

Solid line = no reform, Dotted line = retirement age increase, Plotted box line = retirement age increase + Swiss indexation

Figure 2
Pension Fund Balances Compared



Source: Feldstein and Siebert, p. 375.

Dotted line = Pre-reform PAYG, Solid line = multi-pillar system

to deficit for the PAYG system. The increase in the retirement age is insufficient to offset these demographic developments.

It is hoped that the creation of the funded system will partially offset the growing projected deficits mentioned above. The projections in Figure 2 attempt to gauge the potential of the funded system for managing these deficits. (Feldstein and Siebert, p. 375) The largest item that does not enter the PAYG system is employee contributions that members of the fully funded system pay into their individual accounts (8 percent of earnings). This diversion of funds causes the larger early deficits of the multi-pillar system reflected in Figure 2. In fact, HUF 186 billion of the deficit is directly attributable to the loss of revenue from members of the multi-pillar system. (*National Strategy Report...*) Currently 62 percent of insureds are part of the multi-pillar system, and when the system matures it should contribute 25 percent of individual retirement benefits. As the first members (200,000 people) of the fully funded system retire in 2022 (those who are in their forties in the year 2000), the rate of deficit growth from the PAYG system will begin to decline; yet overall expenditures will continue to grow due to the increasing dependency ratio. By 2050 the system will cover 2.8 million retirees and will generate an expenditure of 9.8

percent of GDP annually. The funded pillar will contribute an estimated 2.2 percent of the overall expenditure.

This projection shows that the 1997 reforms have had two distinct impacts on system expenditures and PAYG deficits funded by the central budget. The cost-cutting measures discussed earlier will lead to annual savings of 0.9 percent of GDP as well as to a small pension fund surplus until 2010. Though the funded pillar will cover an increasing percentage of the costs, deficits in the unfunded pillar will continue to grow due to the loss of proportional revenues from a decreasing number of working age contributors.

Conclusions

The Hungarian pension reform has undoubtedly succeeded in improving the financial sustainability of the system. Without such changes, the system would generate very large deficits, which would in turn create a significant drag on the fiscal operations of the government. Though a crisis has been averted, even more savings can be achieved by moving from a retirement age of 62 years to 65, which is the standard in most other OECD countries. Further cost cuts can be realized by moving from Swiss to full-price indexation. This would

cause pension benefits to fall relative to wages and reduce the system's obligations to retirees.

Pension adequacy, as I have shown, is questionable at the moment. It seems clear that a large portion of the Hungarian population will be forced to live on pensions that are significantly lower than the minimum subsistence level. This is a difficult problem because the "ideal" in pension legislation is to match pension levels to contribution levels. An obvious improvement would be the development of stronger and more efficient investment funds. Hungarian funds must generate returns that are more in line with those of other countries using funded pensions. Increased fund competition and reinvestment of fund portfolios away from low performance government bonds would also help the situation. Finally, minimum pension levels must be increased significantly. Though only a very small percentage of the population currently receives these mini-

mum payments, they are unacceptably low. The most promising solution to the adequacy problem may be economic prosperity and the availability of higher paying jobs.

Hungary was the first Eastern European state to adopt widespread pension reforms. In light of the immense economic, social, and political pressures that affected the country during that time of transition, it seems a great achievement that the reforms have been implemented. Hungary is now more in line with the global ideal of matching individual's contributions to benefits and it is closer to the EU goal of reducing differences in pension plans of member states. Despite these great achievements, we must acknowledge that more work still needs to be done. In any case, it is clear that ensuring further sustainability through deficit cuts will be a goal in the future and ensuring adequacy of pension benefits a major concern for retirees and workers alike.

REFERENCES

- Adequate and Sustainable Pensions*. Social Protection Committee of the European Union, September 2005.
- Baxandall, Phineas. "Hungary: Retrenchment amidst Radical Restructuring," in *Diminishing Welfare: A Cross-National Study of Social Provision*. G.S. Goldberg and M. Rosenthal, eds. Westport, CT: Greenwood Publishing Group, 2003.
- Blair, Joseph. "Spanish Pension Reform." *Perspectives on Business and Economics*, Vol. 23, 2005, pp. 13–24.
- "Commission Proposes to Formalize EU Co-operation on Pensions." European Union. Online. www.europa.eu.int/comm/employment_social/news/2001/jul/165_en.html. Accessed September 2005.
- "EEC Regulation Number 1408/71." European Union. Online. www.europa.eu.int/comm/employment_social/soc-prot/schemes/regulations/1408_g_en.htm. Accessed December 2005.
- EUROSTAT. Online. www.epp.eurostat.cec.eu.int/. Accessed January 2006.
- Feldstein, Martin and Horst Siebert. *Social Security Pension Reform in Europe*. Chicago: University of Chicago Press, 2002.
- "The German Precedent." Social Security Administration. Online. www.ssa.gov/history/age65.html. Accessed September 2005.
- Glassman, Steven. "The Swedish Pension Reform." *Perspectives on Business and Economics*, Vol. 22, 2004, pp. 15–24.
- Hablicsek, László. *Demographics of Population Ageing in Hungary*. Hitotsubashi University. Online. www.ier.hit-u.ac.jp/pie/English/index.html. Accessed February 2006.
- "Hungary: Health and Welfare." Federal Research Division of the Library of Congress. Online. www.countrystudies.us/hungary/65.htm. Accessed September 6, 2005.
- "Information: The Statutory Pension System in Hungary." Central Administration of National Pension Insurance. Online. January 2005. www.onyf.hu/. Accessed February 2006.
- Marin, Bernd, Hans Stefanits, and Geza Tarcali. *The Hungarian Pension System and Reform*. World Bank, January 2006.
- "The Mission and Duties of the HFSA." Hungarian Financial Supervisory Authority. Online. www.english.pszaf.hu/engine.aspx?page=pszafen_guidelines. Accessed December 2005.
- National Strategy Report on Adequate and Sustainable Pensions: Hungary*. European Union, July 2005.
- The Observatoire Social Européen. Online. www.ose.be/en/default.htm. Accessed January 2006.
- Orban, Gabor and Daniel Palotai. *The Sustainability of the Hungarian Pension System: A Reassessment*. Magyar Nemzeti Bank, February 2006.
- Palacios, Robert and Roberta Rocha. *The Hungarian Pension System in Transition*. The World Bank Central European Office, November 1997.
- Quality and Viability of Pensions — Joint Report on Objectives and Working Methods in the Area of Pensions*. Employment and Social Policy Council, European Union, November 23, 2001.
- Réti, Pal. "Governing the New Economy." *Hungarian Quarterly*, Vol. 42, No. 161, Spring 2001.
- Simonovits, Andras. *The New Hungarian Pension System and Its Problems*. Institute of Economics of the Hungarian Academy of Sciences, December 2005.