The Impact of Immigration on the Japanese Economy: A multi-country simulation model

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THE IMPACT OF IMMIGRATION ON THE JAPANESE ECONOMY:
A MULTI-COUNTRY SIMULATION MODEL[1]

Abstract

To quantify the impacts of immigration on the Japanese economy, we present a large-scale numerical dynamic equilibrium model with OLG and a total of 16 countries and regions, both those that are industrialized including Japan, the U.S. and EU, and developing countries China, Brazil, the Philippines and Peru.

Our simulation results show that immigration will improve the Japanese economy. Specifically, annual immigrant flows of 150,000 will dramatically improve the welfare of current and future generations. On the other hand, we can't expect a significant long-run improvement in welfare solely by implementing a policy increasing the consumption tax. The results indicate that substantially increased inflows of working-age immigrants would alleviate the need for future fiscal reform and also help to dramatically reduce the public pension burden on the working generations.

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1. Introduction

Industrialized countries are now facing unprecedented demographic changes that require extensive reform in fiscal systems, social security systems, and other related programs. However, due to conflicting interests between younger and older generations, reform may be restricted. As an example, in order to improve the sustainability of a pay-as-you-go pension system, the government has the option of reducing the benefits to the elderly or increasing the burden on the working generation. Obtaining agreement on reform by both generations is often too difficult for the government to achieve.

Most industrialized countries have explicit immigration policies, but Japan is an exception in that its policy has not been articulated. To address this shortcoming, the ruling Liberal Democratic Party (LDP) recently proposed the introduction of an explicit immigration policy as swiftly as possible. The LDP suggested that an increase in immigration would improve the welfare of both the current and future generations. Moreover, certain economic organizations including Japan's largest - Nippon Keidanren (Japan Business Federation) - also insist that receiving immigrants will maintain the sustainability of the social security system and avert the expected decline in economic growth. To date, however, these proposals have not been fully evaluated.

The aim of this paper, therefore, is to quantify the impacts of immigration on the Japanese economy. To this end, we use a large-scale numerical dynamic equilibrium model with overlapping generations (OLG) and multiple countries/regions. The 16 total countries observed include both industrialized countries and regions such as the U.S. and EU as well as developing countries such as China, Brazil, the Philippines, and Peru.

The pioneering OLG model was built by Auerbach and Kotlikoff (1987). Since then, OLG models have been used extensively to study the impact of population aging and to evaluate various policy changes including tax policy, pension policy, and public debt policy.

To our knowledge, there are only three A-K type OLG simulation models using multiple countries to evaluate the effects of global aging on international capital flows and the worldwide economy, namely, Fehr et al. (2004), Börsch-Supan et al. (2006), and Aglietta et al. (2007).

Fehr et al. (2004) and Börsch-Supan et al. (2006) incorporate only industrialized countries in their model. And even though Aglietta et al. (2007) include both industrialized and developing countries, only 19 generations are contained in their model. Moreover, all three of these models have the *same values of deep parameters* such as utility and production.

This study, however, models a total of 16 industrialized and developing countries covering 65 generations *with different values of deep parameters depending on their status.*

Storesletten (2000) has calibrated a general equilibrium OLG model of the U.S. economy by explicitly taking into account the differences between immigrants and natives to estimate the long-run fiscal impact of immigrants. He found that the fiscal impact of immigration on the host

country is positive, even taking into consideration the age and skills of the new immigrants. Meanwhile, Fehr et al. (2004) have developed a three-region (U.S., Japan and the EU) dynamic general equilibrium OLG model to analyze whether immigration can alleviate the negative impacts of demographic transition on an economy. They concluded that immigration will not alter the major negative impacts regardless of the skill level of immigrants.

However, our result is different from that of Fehr et al. (2004) in that their model is based on immigrants coming from countries outside of the model. Therefore, they haven't included the effects that the demographic changes of the immigrant supply countries have on the three regions (U.S., Japan and the EU) through the international capital flows caused by the changes in the capital labor ratios of the out-migration countries. To illustrate, we consider two cases in which there are only two countries, A and B. In the first case, part of the working generation emigrates from country A to country B, and in the second case part of the working generation comes from outside of both countries to country B. In the first case, the capital labor ratio of A has rising pressure and that of B has falling pressure (See Figure 1). On the other hand, in the second case the capital labor ratio of A has no pressure and the capital labor ratio of B has only falling pressure (Figure 2). For this reason, after capital market equilibrium there exists the possibility that the capital labor ratio of B in the first case would be higher than that in the second case. As a result, in the first case, there also exists the possibility that the capital labor ratio of B, after immigration, could be close to that before immigration.

In addition, it is important to analyze the differences in the effects of the following immigration policies: 1) the first policy where an increase in immigration is permanent; and 2) the second policy where an increase in immigration is temporal. It is also important to evaluate the differences in the timing of the increases in immigration. However, Fehr et al. (2004) have not analyzed the differences in these effects.

A vast number of studies has also been devoted to the problem of aging in Japan using the OLG model, such as Homma et al. (1987), Kato (1998, 2002), Sadahiro and Shimasawa (2001, 2003), Okamoto (2005), and Ihori et al. (2006). They found that as the life-cycle hypothesis of consumption behavior serves a crucial role in the model in line with the A-K type OLG model, population aging leads to a sharp reduction in the savings rate, affects capital formation, factor prices, and therefore the national economy by mirroring the shrinking size of the working-age population. Their simulations showed that there is no easy way to reduce the burden of the increasing number of older people relative to those of working age, although policy reforms can alleviate the economic burden of an aging population.

Even though various policy reforms to cope with aging - reduced pension benefits, increased taxes, and lower public debt - are considered in those studies, to the best of the authors' knowledge no research has yet been carried out to quantify the effects of immigration on the Japanese economy

by using a general equilibrium model with an OLG structure. To date, immigration has not been considered as a policy instrument to cope with aging in Japan.

Therefore, in this paper we use a general equilibrium OLG model calibrated to the Japanese economy to quantitatively evaluate the effects of immigration policies, which are gaining attention as a potential instrument for coping with aging of the population. Multiple countries including the immigrant supply regions of China, South Korea, the Philippines, and Peru are considered in our analysis. By doing this we attempt to answer whether a fundamental change in immigration policy results in significant positive effects on the Japanese economy, especially in terms of the government and public pension fiscal situation.

The results show that a substantial increase in the inflow of working-age immigrants would alleviate the need for future fiscal reform. Furthermore, our findings indicate that immigration would also help to dramatically reduce the public pension burden on working generations.

The structure of this paper is as follows. In Section 2, we review the immigration control in Japan; Section 3 describes the model structure; Section 4 presents the calibration strategy and our findings; and Section 5 contains concluding remarks and policy implications.

2. Background of Immigration Control

In this section, we review the outline and discussion of immigration control in Japan.

At present, Japan does not have an explicit immigration policy, but immigration control in Japan is conducted in accordance with the Immigration Control and Refugee Recognition Act and the Alien Registration Law. Under these regulations, the Immigration Bureau in the Ministry of Justice is responsible for the administration of immigration affairs, which includes the clearing of foreign nationals entering and leaving Japan and overseeing the residency status of foreigners living in Japan.

Based on the alien registration system operated by the Immigration Bureau, all foreign residents are required to register at their local municipal office within 90 days of arrival in Japan. This policy does not include temporary foreign visitors who leave Japan within three months without registering. Therefore, the data on foreign nationals registered in Japan contains statistics on those who stay in excess of three months for such purposes as study, employment, marriage or other family relationships, and live a "settled life" in the local community.

According to the statistics published by the Ministry of Justice in 2008, the total number of registered foreign nationals residing in Japan has increased every year and totaled 2,152,973 as of the end of 2007. The proportion of registered foreign nationals to the total Japanese population has also increased every year to 1.69% in 2007. According to the statistics, by nationality (place of origin) the most registered foreigners come from China, who exceeded the number from the Korean

peninsula for the first time in 2007. Registered foreigners from the Korean peninsula make up the second largest percentage, followed by Brazil, the Philippines, and Peru.

The United Nations Population Division (2000) has analyzed several immigration scenarios by which a country could prevent the decline and aging of population that results from low fertility and mortality rates. The report deals with low-fertility countries, such as France, Germany, Italy, Japan, Republic of Korea, the United Kingdom, the United States, etc., and two regions: Europe and the European Union. The immigration scenarios for the period 1995–2050 focus on the impact that various levels of immigration have on population size and population aging. The report contains three main findings: 1) In the next 50 years, the populations of most industrialized countries are projected to become smaller and older as a result of low fertility and increased longevity; 2) in contrast, the population of the United States is projected to increase by almost a quarter; and 3) population decline in Japan is inevitable in the absence of replacement migration, even if fertility rebounds in the coming decades.

With regard to this issue, the ruling Liberal Democratic Party (LDP) in Japan recently proposed that Japan introduce an explicit immigration policy as swiftly as possible and receive 10 million immigrants in the next 50 years (a net inflow of 200,000 annual immigrants per year), a number significantly greater than the 68,054 net inflow measured in 2007. The proposed policy is expected to aim for an increase in immigration to improve the welfare of both current and future generations.

3. The Model Structure

In this section, we describe the demographic and economic structure of our model. The model used here is a computable general-equilibrium OLG model with perfect foresight agents, multiple periods and multiple countries. In our model, there is a representative individual for each generation in the households sector. Each individual at age 20 maximizes his/her inter-temporal utility function with consumption and bequest. The representative competitive firm has a standard Cobb-Douglas production technology and maximizes its profits. In our model, not only the goods market but also factor markets are perfectly competitive. The model has mainly five building blocks: 1) demographic projection, 2) household behavior, 3) firm behavior, 4) the government, and 5) the public pension. Details of each block follow. To limit notation, we suppress regional indices to the extent possible. Initial values and parameters for these building blocks will be described in Section 4.

(1) Demographic projection

In our model, we deal with a demographic projection as exogenous. In each region, the size of total population of age j in the period t, $N_{t,j}$ is given recursively by:

$$N_{t,j} = N_{t-1,j-1} + M_{t,j} \quad for \quad j > 0, \quad N_{t,0} = \sum_{j=16}^{50} f_{t,j} N_{t-1,j} \quad and \quad MM_t = \sum_j M_{t,j} \tag{1}$$

where $M_{t,j}$ denotes the migration in j age-cohort at the time t, $f_{t,j}$ the age-specific fertility rate, and MM_t the aggregate net migration in the period t.

In addition, to simplify calculations in our model we don't distinguish between natives and immigrants in the model once the immigrants have entered the age specific group of the host country.

(2) Household behavior

There is a representative individual for each generation in the household sector. We assume that preferences are the same for all agents in all generations. Moreover, each individual lives for a fixed number of periods. In each period of the model, the oldest generation dies and a new one enters. And the representative individuals maximize their inter-temporal utility function with consumption and bequest subject to their lifetime income. They are also assumed to be rational, having perfect foresight. In the mth region, each generation enters the labor market at age 21, retires at age Q_m, is granted a pension at $Q_m + 1$, and dies at age Z_m. In addition, each supplies labor inelastically. The within-period utility function exhibits constant relative risk aversion, and preferences are additive and separable over time. In each region, the utility functions of the ith generation are specified as:

$$U_i = \sum_{j=1}^{Z-20} \left(\frac{1}{1+\rho}\right)^{j-1} \frac{c_{i,j}^{1-\gamma}}{1-\gamma} + \varsigma \left(\frac{1}{1+\rho}\right)^{Z-21} \frac{q_i^{1-\gamma}}{1-\gamma} \tag{2}$$

where j refers to the jth period of life, ρ the pure rate of time preference, γ the reverse of the elasticity of inter-temporal substitution, and ς the bequest motive. The arguments of the utility function are the consumption per period ($c_{i,j}$) and the bequest at the death period (q_i). Leisure does not enter the utility function since the individual's labor supply is assumed to be exogenous.

Moreover, the technological progress λ is assumed to be exogenous and labor embodied. We model age-specific labor productivity by assuming a hump-shaped age-earnings profile, i.e., a quadratic form of its age j, so its age-wage profile e_j takes the following form:

$$e_j = \theta_0 + \theta_1 j + \theta_2 j^2 , \qquad \theta_0, \theta_1 \geq 0 \text{ and } \theta_2 \leq 0 \tag{3}$$

The inter-temporal budget equation of each generation may be described as follows:

$$\sum_{j=1}^{Q-20} PDV_{i,j}(1 - \tau w_t - \tau p_t)w_t(1+\lambda)^t e_j + \sum_{j=Q-19}^{Z-20} PDV_{i,j} p_{i,j} + q_{i-(Z-21)}/\Omega_i$$

$$= \sum_{j=1}^{Z-20} PDV_{i,j} c_{i,j}(1+\tau c_t) + PDV_{i,Z-20}(1+\tau b)q_i \tag{4}$$

where *PDV* refers to the factor of the present discounted value, w_t is the wage rate at time $t \equiv i+j-1$, e_j is the wage profile at age j, τw_t is the labor income tax rate at time t, τp_t is the public pension contribution rate at time t, λ measures the rate of technical progress, Ω_i is the population ratio of generation i to generation $i-(Z-21)$, τc_t is the consumption tax rate at time t, τb is the inheritance tax rate, and $p_{i,j}$ stands for the pension benefit of generation i at age j.

Each generation maximizes its utility function (2) under the budget constraint (4).

With the maximization procedure, i.e. differentiating the household utility function (2) with respect to $c_{i,j}$ and q_i, subject to the individual's life-time budget constraint (4), yields the following Euler equations concerning consumption per period.

$$c_{i,j} = \left\{ \frac{1 + r_t(1 - \pi_t)}{1 + \rho} \right\}^{\frac{1}{\gamma}} \left\{ \frac{1 + \pi_{t-1}}{1 + \pi_t} \right\}^{\frac{1}{\gamma}} c_{i,j-1} \quad , \quad C_t = \sum_{j=1}^{Z-20} N_{t,j} c_{i,j} \tag{5}$$

where r_t is the interest rate at time t, π_t is the tax rate on interest income at time t, $N_{t,j}$ measures the number of people at age j in period t, and C_t is the aggregated consumption at time t. This Euler equation dictates, as in any life-cycle model, that the trade-off between current and future is determined by the ratio of the interest rate and the time preference rate, and by the degree of risk aversion.

We can also derive the following physical wealth accumulation equation:

$$a_{i,j} = a_{i,j-1}\left\{1 + r_t(1 - \pi_t)\right\} + (1 - \tau w_t - \tau p_t)w_t(1 + \lambda)^t e_j - (1 + \pi_t)c_{i,j} \quad , PA_t = \sum_{j=1}^{Z-20} N_{t,j} a_{i,j} \tag{6}$$

where $a_{i,j}$ is the physical wealth asset of generation i at age j and PA_t is the aggregated private asset in period t.

(3) Firm behavior

The input/output structure is represented by the Cobb-Douglas production function with constant return to scale. The firm decides its demand for physical capital and effective labor in order to maximize its profit with the given factor prices of wage and rent, which are determined in the perfect competitive markets.

$$Y_t = A K_t^\alpha L_{e,t}^{1-\alpha} \tag{7}$$

$$K_t = I_t + (1 - \delta)K_{t-1} \tag{8}$$

where Y is output, α stands for capital income share, A is a scale parameter, δ is the depreciation of physical capital, K is the physical capital stock, and L_e is the effective labor.

We can derive two factor prices, the rate of return r_t and the wage rate per unit of effective labor w_t, by the first-order conditions for a firm's maximum profit:

$$r_t = \alpha A K_t^{\alpha-1} L_{e,t}^{1-\alpha} - \delta \quad , \quad w_t = (1-\alpha)A K_t^\alpha L_{e,t}^{-\alpha} \tag{9}$$

(4) The Government

The government sector has three types of taxes: wage tax, consumption tax and capital tax. It issues public debt to supplement its tax revenue and pays the consumption, investment, and interest payments as expenditures.

$$T_t = \tau w_t \sum_{j=1}^{Q-20} \left\{ w_t (1+\lambda)^t e_j \right\} N_{t,j} + \pi c_t \sum_{j=1}^{Z-20} c_{i,j} N_{t,j} + \pi_t \sum_{j=1}^{Z-20} a_{i,j} N_{t,j} \tag{10}$$

We keep all tax rates constant.

The role of the government is to endogenously determine the rate of the public debt issue as a residual of government expenditure and revenue.

$$\begin{aligned} Bond_t &= G_t - T_t \\ D_t &= (1+r_t)D_{t-1} + Bond_t \end{aligned} \tag{11}$$

where $Bond_t$ is the public debt issue at time t, G_t stands government expenditure at time t, T_t denotes tax revenue at time t, D_t denotes public debt at time t.

As mentioned above, the public debt issue is set endogenously due to the difference between expenditure and tax revenue. It should be noted that the public debt issue to GDP ratio will change over time as a result of possible imbalances between revenues and expenditures. Thus we don't know whether the fiscal policy of a country is sustainable and whether the government's inter-temporal budget constraint must be satisfied.

(5) The public pension

The pension sector grants a pension to the retirement generations while pension contributions are collected from the working generations.

$$P_t = \sum_{j=1}^{Q-20} \tau p_t w_t (1+\lambda)^t e_j N_{t,j} \tag{12}$$

where P stands for the aggregated pension contribution.

The aggregated pension benefits at time t are given by the product of the population of retirement age, replacement rate, and average earnings during their working time $\overline{W}_j$.

$$B_t = \sum_{j=Q-19}^{Z-20} \beta \, \overline{W}_j N_{t,j} \tag{13}$$

where β denotes replacement rate and B is the aggregated pension benefit.

We explicitly model the public pension system as pay-as-you-go. The budget constraint of the pension sector can be shown as follows:

$$P_t = (1-sp)B_t \tag{14}$$

where sp denotes a public pension subsidy, which is financed by government expenditure G_t.

Moreover, we assume that the public pension sector maintains a fixed replacement rate exogenously. As a result, in our model, the pension contribution rate is endogenously determined in order to keep the budget constraint (14).

(6) World equilibrium

First, in our model of an open economy, market clearing on the international capital market and

the assumption of perfect capital mobility across regions requires that the rate of return on financial investment is equal across all countries:

$$(1 - \pi_t^m) r_t^m = \tilde{r}_t \tag{15}$$

where m denotes the mth region. And the aggregate value of world assets equals the market value of worldwide capital stocks plus the value of all outstanding regional government bonds:

$$\sum_{m=1}^{n} PA_t^m = \sum_{m=1}^{n} K_t^m + \sum_{m=1}^{n} D_t^m \tag{16}$$

where m denotes the mth region, and n the total number of regions, which is 16 in our model.

Next, the sum of the aggregate net migration of the mth region across all world regions equals zero:

$$\sum_{m=1}^{n} MM_t^m = 0 \tag{17}$$

Finally, in order to close the model structure logically, an equilibrium condition must hold in the goods market. It requires that the aggregate worldwide supply be equal to total worldwide demand.

$$\sum_{m=1}^{n} Y_t^m = \sum_{m=1}^{n} \left\{ C_t^m + G_t^m + K_{t+1}^m - (1 - \delta^m) K_t^m \right\} \tag{18}$$

4. The Data, Calibration, and Scenarios

4.1. Data and calibration

In order to analyze the differences among the effects of several immigration policies, we distinguish between 16 world countries/regions: 1) Japan, 2) the U.S., 3) China, 4) South Korea, 5) India, 6) Indonesia, 7) Bangladesh, 8) Philippines, 9) Thailand, 10) Vietnam, 11) Brazil, 12) Peru, 13) Australia, 14) Canada, 15) Europe, and 16) Rest of World. With the exception of the United States, Europe, and Rest of World, the above regions are immigration suppliers to Japan according to the statistics of registered foreign nationals published by the Ministry of Justice, Japan.

Our demographic projection model for these regions is calibrated to fit the United Nations (2007) projections. UN population data for 1950–2050 are given at an annual frequency for five-year age groups. Moreover, data such as age-specific fertility rates is given only at quinquennial frequency. Therefore, we interpolate between age groups and time intervals and fit our population model to the UN population data for the time period 1950–2050. To simplify the calculation, we assume that age-specific fertility rates are constant at the current level.

In addition, we present the values of the main parameters and exogenous variables of the model in Table 1. The parameter values for the behavior of households and firms are derived from

Auerbach and Kotlikoff (1987) and various early OLG simulation studies in Japan.[2] These parameters, such as technological and preference parameters, are assumed to be constant and equal across all regions, except capital share parameters which differ between developed and developing regions.

The exogenous variables such as the macroeconomic, fiscal and public pension variables are derived mainly from the OECD (2007) "Tax Database," ISSA (2006–2008) "Social Security Programs Throughout the World," and Whitehouse (2007) "Pensions Panorama."[3]

We start our calculations with a phase-in period of about 100 years in order to relax the unrealistic assumption of a steady state in the 2006 base year of our simulation. Moreover, since the model is simulated over 500 periods, we ensure a sufficiently long period for a steady state to be achieved.

Table 2 reports the actual values of some key variables in 2005 and the computed values in the model. Note that actual and calculated values closely correspond.

4.2. Scenarios

Next we present simulation scenarios. The scenarios are classified into four categories. Scenario 1 assumes a no-immigration baseline case, and Scenarios 2-4 assume the arrival of 150,000 immigrants annually after 2015. Scenario 5 assumes the arrival of 750,000 immigrants annually after 2015. Scenarios 6 and 7 assume no immigration but an increase in the consumption tax to 20% and 30%, respectively, from 2015. Finally, Scenario 8 is the policy-mix of Scenario 2 (permanent immigration) and Scenario 7 (30% consumption tax reform).

Scenarios 1-5 and 8 assume that the demographic structure of new immigrants in each age group conforms with the current demographic structure of registered foreign nationals as published by the Ministry of Justice, Japan. To quantify the impacts of the immigration flows, we break down the cases of Scenarios 2-5 and 8 in more detail.

In Scenarios 2, 5 and 8, the increase of immigration in Japan is permanent from 2015. In Scenario 3, the increase of immigration in Japan is temporal for 2015–2030. In Scenario 4, the timing of the increase of immigration in Japan is different from that of Scenarios 2, 3, and 8. It starts at 2025. We do not distinguish between natives and immigrants in the model once they have joined the native Japanese population.

5. Simulation results

We now turn to describe the simulation results reported in Figures 3-5 and Tables 3-19. For

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[2] See Homma et al. (1987), Kato (1998, 2002), Sadahiro and Shimasawa (2001, 2003), Uemura (2002), Okamoto (2005), Ihori et al. (2006).
[3] In our model, due to the reason that detailed capital tax data were unavailable in some developing regions, capital tax variables are assumed to be equal to 20% across all regions.

tractability, we focus on Japan because its case is unique compared to other advanced countries facing severe aging, such as Germany and Italy. In contrast to other countries, Japan has a very low immigration rate and has traditionally admitted few immigrants. We present the results of the immigration scenarios in comparison to the cases of no immigration flows, the case of consumption tax reform, and the case of policy-mix (immigration and consumption tax reform) in Japan.

(1) Macroeconomic variables

Immigration contributes to the rise in the working age population rate and to the reduction in the ratio of older people (65 years old and above). In Scenarios 2-4 and 8, we consider an annual flow of 150,000 immigrants. In 2100, the proportion of immigrants reaches 37% of the total population of Japan in Scenarios 2 and 8, 16% in Scenario 3, and 29% in Scenario 4 (See Figure 3). In Scenario 5 with an annual flow of 75,000 immigrants, in 2100 the proportion of immigrants reaches 21% of the total population of Japan.

Figure 4 shows the transition of the working age population ratio. In the case of no immigrants, it declines substantially over the next 100 years. However, in each immigration scenario, the working age population ratio increases gradually from 2050. Figure 5 shows the retired population ratio. While the ratio continues to increase to 37% in the long run without immigration, in each immigration scenario the retired population increases at a lower rate because immigration mitigates the progress in aging and lowers the elderly population ratio by a few points in 2100, i.e., to 10% in Scenarios 2 and 8, 3% in Scenario 3, 9% in Scenario 4, and 5% in Scenario 5. Thus it can be seen that the inflow of immigrants reverses the progress of population aging.

As we adopt the lifecycle hypothesis, the savings rate is severely affected by the rise of the elderly population rate, which is strongly correlated with the demographic trend. In Scenarios 1-6, there is no significant change in the savings rate trend during the simulation periods. But its level differs in each scenario. In Scenario 1 (no immigration), the net national savings-to-GNP ratio shows a tendency to decrease from 10.23% in 2005 to -2.70% in 2050, and to -45.71% in 2075. Table 3 shows that the rejuvenation of the population structure caused by the inflow of immigration raises the savings ratio. In addition, Table 3 shows that the savings ratio in Scenario 6 (consumption tax reform) is substantially higher and, unlike other scenarios, it does not set negative value until 2075. The ratio of this scenario, however, also goes to a negative value in 2100. This means that in order to make the savings ratio a positive value, it requires more fundamental fiscal reform such as a drastic reduction of government debt or immigration. In fact, the savings ratio of Scenario 7 (30% consumption tax reform) or Scenario 8 (policy-mix) does not go to a negative value in 2100.

Because of the assumed technology and lifecycle hypothesis, the GNP is determined mainly by working-age population dynamics. In the baseline scenario, the GNP level grows stagnant. It declines markedly from 2030 to 2100, reflecting the declining labor force, while it continues to rise

over three decades. And then the GNP declines dramatically to 0.93% in 2100 from the base year 2005. In contrast, in other scenarios, the GNP in 2100 is higher because of the effects of immigration or fiscal reform with the rise in consumption tax. In immigration scenarios, this is due to three effects: 1) the continuous immigrant flows imply less population aging than under no immigration; 2) immigration increases the labor force; and 3) the children and the grandchildren of immigrants also contribute to decreased population aging and the labor force increase in the long run. As for the quantitative effects of the labor force supply, these are especially noticeable in the cases with immigration compared to the case of no immigration.

This is shown in Table 3. In Scenarios 6-8 (consumption tax reform or policy-mix), GNP per employee substantially increases from 2050 to 2100. But in Scenarios 2-5, it also noticeably increases in 2100 as a result of the quantitative effects of labor force supply. The increase in Scenario 2 (permanent immigration) in particular is larger than other immigration scenarios. Scenario 4 (delayed immigration) lowers GNP per employee by 17% in 2100. Scenario 3 (temporal immigration) and Scenario 5 (half immigration) have a comparable effect to GNP per employee in 2100. Therefore, we can confirm that immigration promotes quantitative expansion of the Japanese economy because immigration increases the labor force, which fuels economic growth.

Now, we briefly evaluate factor prices. In each scenario, due to the capital market equilibrium, the interest rate (wage rate) fluctuates within a narrow range over the century. Starting from 3.31% in 2005, it decreases until 2030 and then rises thereafter. And again it decreases, reaching 3.20% by the year 2100. The results of our simulation show that factor prices are surprisingly almost the same in Scenarios 1-8.

(2) Fiscal and pension variables

Generally, immigration can be expected to give the fiscal balance and the public pension budgets ambivalent effects through several channels. An inflow of working age immigrants initially increases tax bases, and then changes the trend of government's and pension's revenue and expenditure. As a result, government debt will be reduced.

In Scenario 1 (no immigration), the aging of the baby boomers increases the number of retirees in the total population. In order to balance the budget, the pension premium to wage rate is increased. Table 3 shows that despite the peak in the pension premium to wage rate in each scenario occurring in the middle of this century, the peak rate is reduced by 0.39% in Scenario 2 (permanent immigration) compared to Scenario 1, and the long run pension premium to wage rate is reduced by 3.66% in 2100. In Scenario 3 (temporal immigration), the long run rate is also reduced by 1.13%, in Scenario 4 (delayed immigration) by 3.21%, and in Scenario 5 (half immigration) by 2.01%.

In addition, even though the public debt to GDP ratio gradually increases in each scenario over this century, the ratio is reduced by 1291.74% in 2100 in Scenario 2 (permanent immigration)

compared to Scenario 1. In Scenario 3 (temporal immigration), the ratio is also reduced by 582.29%, in Scenario 4 (delayed immigration) by 1038.22%, in Scenario 5 (half immigration) by 739.87%, in Scenario 6 (20% consumption tax reform) by 1996.57%, in Scenario 7 (30% consumption tax reform) by 2997.55%, and in Scenario 8 (policy-mix) by 3331.28%.

The reason why year 2100 in Scenario 3 shows the smallest reduction in the rate of pension premium to wage and public debt to GDP is due to temporal immigration and the increase in the public pension burden caused by aging immigrants in the long run. That is to say, the government and pension budgets improve the premium because of expansion of the tax base in the short run; but when immigrants retire, the impacts on tax revenues and pension revenues would be expected to be reversed. As aging immigrants increase pressure on pension expenditure and decrease tax revenues, fiscal and pension balance will deteriorate.

(3) Welfare

Table 19 shows the generational welfare of Scenarios 1-8. These are the welfare values of subsequent cohorts measured in terms of lifetime utility level the cohort born in 1930 gains in the baseline simulation. The long-run increase in the pension premium to wage rate caused by the progress of aging makes the amount of resources available within their lifetime decrease. The long-run increase in the public debt to GDP ratio also reduces private capital stock available and possibly decreases future growth. Current and future generations suffer a severe welfare loss.

In Scenarios 2-8 in Table 19, compared with Scenario 1, we measure the welfare of each generation with equivalent variation. The welfare values of Scenario 1 gradually decline and this scenario doesn't have a bottom over the century, but Scenarios 2-5 have a bottom at the welfare of the generation born in 2020, Scenarios 6 and 7 have a bottom, which is the welfare of the generation born in 2055, and Scenario 8 also has a bottom at the welfare of the generation born in 2075.

In addition, in Scenario 2 the generations of Japanese born after 1970 obtain a welfare gain, whose burden of pension and public debt is reduced by immigration intake. In particular, the welfare of the generation born in 2080 dramatically increases by 20.5%. In Scenario 3, the welfare of the generation born in 2080 increases by 5.1%, in Scenario 4 by 19.8%, in Scenario 5 by 13.3%, and in Scenario 8 by 3.2%.

On the other hand, in Scenarios 6 and 7, the generations of Japanese born after 1940 suffer a welfare loss whose burden is covered by an increase in consumption tax.

Therefore, from the comparison between the immigration scenarios, the consumption tax reform scenario and the policy-mix scenario, we draw the following conclusion. Immigrants are expected to make large net contributions to the Japanese economy. It is a very good policy for Japan to receive immigration from the viewpoints of not only macroeconomic, fiscal, and pension variables but also welfare changes. This policy enlarges lifetime resources that benefit the current

and future generations, and reduces the excess burdens on the public pension system. In contrast, the policy that only increases the consumption tax does not seem to be advantageous because it boosts excess burdens arising from the extreme increase in taxes. Therefore, we will need a policy such as Scenario 8 (policy-mix).

6. Concluding remarks

In this paper, we presented an OLG simulation model using 16 countries and regions in order to analyze the impact of immigration in Japan. Our simulation results show that immigration will improve the Japanese economy. Specifically, annual immigrant flows of 150,000 will dramatically increase the welfare of current and future generations. On the other hand, we can't expect a significant long-run welfare improvement solely from carrying out the policy of increasing the consumption tax. If both the sustainability of the fiscal budget and the improvement of the welfare of current and future generations are requirements, we will need to promote a policy such as policy-mix with immigration and additional fiscal reform, i.e. increasing the consumption tax.

The weakness of our study is that this paper does not analyze three points: 1) the social cost of immigration, such as the additional public education cost for immigrants' children, 2) the difference between the impact of high-skill and low-skill immigrants, and 3) the scenario in which the birthrate of immigrants does not soon decline to the same level as that of natives when they have joined the Japanese population. These points remain subjects for future study.

Finally, increasing immigration is not a simple matter. When implementing immigration policy to support sustained economic growth even at a time of population aging, Japan will face enormous difficulties. From the receiving perspective, can immigration flows of this order of magnitude be sustained over an extended duration? From an immigrant perspective, is contemporary Japan sufficiently attractive for foreigners to take on the challenge of language and cultural barriers? And finally, would such an immigration policy exacerbate the brain drain that is already harming the economies of out-migration countries, and therefore be met with strong resistance? Even given the difficulty of the task, Japan, like other industrialized countries, must confront these and other obstacles and solve the related issues to chart a productive and viable future for its immigrant and native-born population.

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Figure 1   Case 1 with Immigration from A to B
(our model)
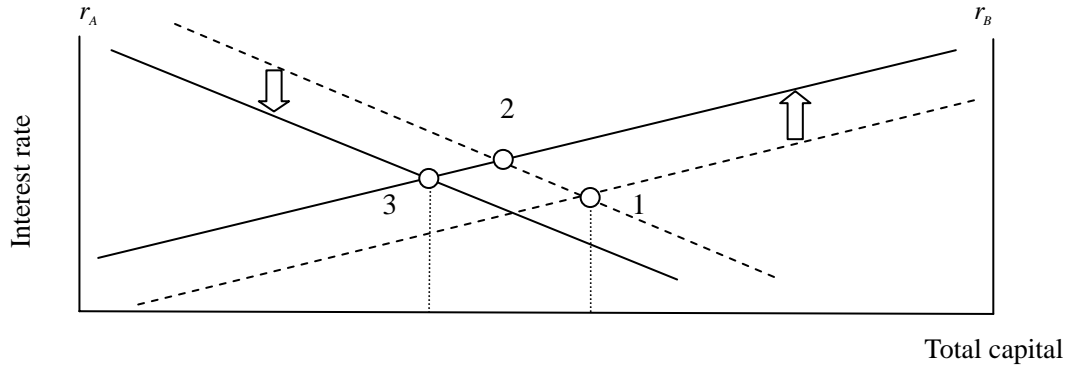
Figure 2   Case 2 with Immigration from Outside of Both Countries to B
(Fehr et al. model)
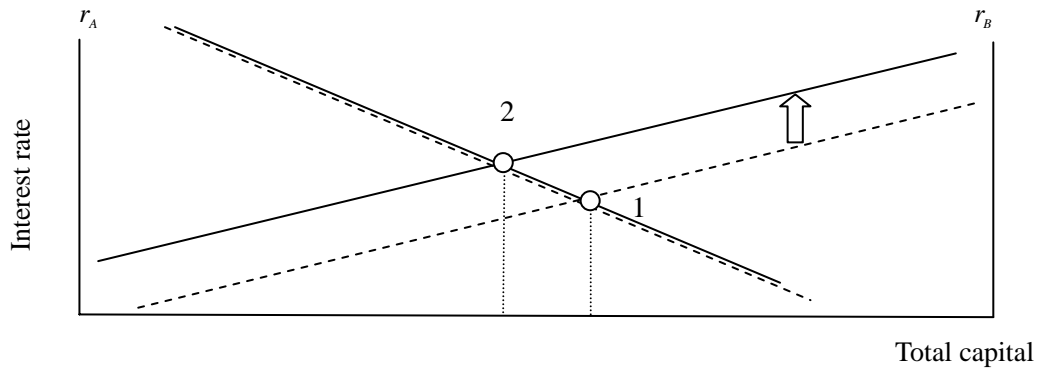
Note: In Figures 1 and 2, $r_j \equiv \alpha_j A_j (K_j / L_j)^{\alpha_j - 1} - \delta_j$ represents the interest rate of j country (j=A,B), where α_j stands for capital income share, A_j the scale parameter, δ_j the depreciation of physical capital, K_j the physical capital stock, and L_j the labor force. The dashed line represents the relationship between the interest rate and the capital stock of each country before immigration, and the solid line their relationship after immigration. This assumes that total capital $K(= K_A + K_B)$ is fixed and the equilibrium before immigration is Point 1 in Figure 1 and 2. The equilibrium after immigration changes position as in Point 3 in Figure 1, because L_A goes down and L_B goes up. But in Figure 2 this changes position as in Point 2, because L_B only goes up. Therefore, the capital labor ratio after immigration in the first case is higher than that in the second case.

Figure 3　Rate of Immigrants to Total Population
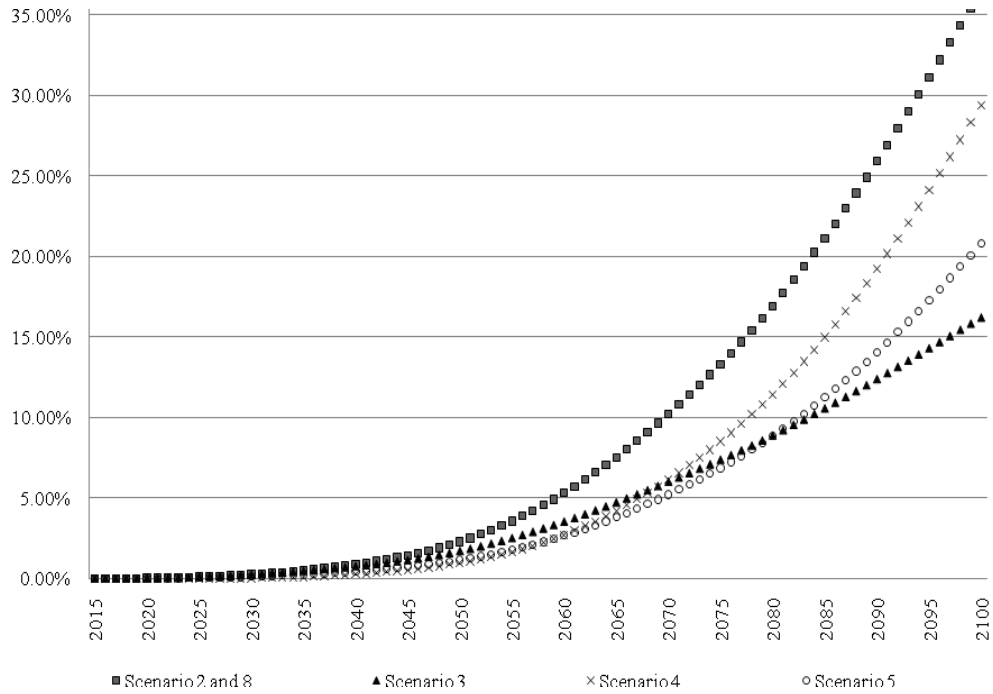
Figure 4　Working Age Population Ratio

Figure 5   Elderly Population Ratio

Table 1　Parameter Values of the Model

|		JAPAN	USA	CHINA	S. KOREA	INDIA	INDONESIA	BANGLADESH	PHILIPPINES
Utility function									
Time preference rate	ρ	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Intertemporal elasticity of substitution	$1/\gamma$	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Bequest motive	ς	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Production function									
Technology progress	λ	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Capital share in production	α	0.3	0.3	0.25	0.3	0.25	0.25	0.25	0.25
Physical capital depreciation	δ	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Tax policy parameters									
Wage tax	τw	11.3%	11.3%	12.5%	12.8%	10.0%	10.0%	6.3%	9.3%
Capital tax	τr	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%
Consumption tax	τc	5.0%	5.0%	17.0%	10.0%	12.5%	10.0%	9.5%	6.3%
Inheritance tax	τb	25.0%	23.5%	0.0%	25.0%	0.0%	0.0%	0.0%	10.0%
Pension policy parameters									
Coverage of pension		High	High	Low	High	Low	Low	Low	High
National subsidy to pension	sp	50.0%	0.0%	0.0%	50.0%	0.0%	0.0%	0.0%	0.0%
Replacement ratio	β	50.3%	38.6%	0.0%	58.5%	0.0%	0.0%	0.0%	0.0%
Other parameters									
Age of retirement	Q	65	66	60	60	58	55	62	60
Average life expectancy	Z	82	78	73	79	65	71	64	72

Table 1   Parameter Values of the Model (continued)

		THAILAND	VIETNAM	BRAZIL	PERU	AUSTRALIA	CANADA	EUROPE	REST OF WORLD
Utility function									
Time preference rate	ρ	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Intertemporal elasticity of substitution	$1/\gamma$	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Bequest motive	ς	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Production function									
Technology progress	λ	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Capital share in production	α	0.25	0.25	0.25	0.25	0.3	0.3	0.3	0.25
Physical capital depreciation	δ	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Tax policy parameters									
Wage tax	τw	10.5%	10.0%	6.9%	10.5%	11.3%	8.2%	11.5%	9.5%
Capital tax	τr	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%
Consumption tax	τc	7.0%	10.0%	16.8%	10.5%	10.0%	10.0%	17.0%	13.0%
Inheritance tax	τb	0.0%	0.0%	2.0%	0.0%	0.0%	0.0%	10.0%	9.0%
Pension policy parameters									
Coverage of pension		Low	Low	Low	Low	High	High	High	Low
Public subsidy to pension	sp	0.0%	0.0%	0.0%	0.0%	50.0%	50.0%	50.0%	0.0%
Replacement ratio	β	0.0%	0.0%	0.0%	0.0%	40.0%	42.5%	60.2%	0.0%
Other parameters									
Age of retirement	Q	55	57	62	60	64	65	63	58
Average life expectancy	Z	71	74	72	71	82	81	75	67

Table 2   Year 2005 of the Baseline Scenario

	JAPAN	USA	CHINA	S. KOREA	INDIA	INDONESIA	BANGLADESH	PHILIPPINES
Model								
National Income (% of GNP)								
Private consumption	81%	84%	68%	76%	81%	69%	92%	78%
Government purchases of goods and services	16%	13%	18%	16%	16%	13%	13%	12%
Current account	6%	6%	17%	10%	5%	20%	-3%	12%
Net national saving	10%	14%	24%	19%	15%	28%	8%	23%
Government Indicators								
Pension premium to wage	11%	9%	0%	10%	0%	0%	0%	0%
Gross public debt *(% of GDP)*	180%	64%	12%	25%	58%	34%	37%	56%
Primary balance *(% of GDP)*	-2.71%	0.00%	0.50%	-1.86%	0.09%	0.18%	-0.02%	-0.10%
Tax revenues *(% of GNP)*	13%	13%	18%	14%	17%	14%	13%	12%
Wage tax	7%	7%	9%	7%	8%	7%	5%	7%
Consumption tax	3%	3%	8%	5%	7%	4%	6%	3%
Capital tax	4%	3%	2%	3%	2%	2%	2%	2%
Other Indicators								
Capital output ratio	254%	381%	543%	377%	357%	540%	258%	499%
Interest rate	3.3%	3.3%	3.3%	3.3%	3.3%	3.3%	3.3%	3.3%
Official								
National Income (% of GNP)								
Private consumption	74%	87%	50%	68%	70%	75%	78%	83%
Government purchases of goods and services	18%	16%	14%	14%	11%	8%	5%	9%
Current account	3.6%	-6.1%	7.1%	1.9%	-1.0%	0.1%	-0.3%	1.9%
Net national saving	12.4%	0.3%	40.8%	18.6%	24.0%	16.9%	20.7%	19.4%
Government Indicators								
Pension premium to wage	14.6%*	12.4%*	-	9%*	-	-	-	-
Gross public debt *(% of GDP)*	175.3%	62.4%	22.8%**	24.7%	78.1%**	41.5%**	37.4%**	53.5%**
Primary balance *(% of GDP)*	-5.9%	-1.6%	N.A	1.7%	N.A	N.A	N.A	N.A
Tax revenues *(% of GNP)*	12%	11%	9%	16%	10%	11%	8%	12%

*   ISSA (2006-2008) "Social Security Programs Throughout the World"
**   S&P (2009) "Sovereign Risk Indicators"

Table 2   Year 2005 of the Baseline Scenario (continued)

	THAILAND	VIETNAM	BRAZIL	PERU	AUSTRALIA	CANADA	EUROPE	REST OF WORLD
Model								
National Income (% of GNP)								
Private consumption	69%	70%	76%	75%	78%	81%	77%	79%
Government purchases of goods and services	12%	14%	15%	15%	14%	11%	18%	16%
Current account	21%	19%	12%	12%	11%	11%	9%	8%
Net national saving	28%	29%	21%	22%	21%	20%	14%	19%
Government Indicators								
Pension premium to wage	0%	0%	0%	0%	11%	12%	19%	0%
Gross public debt *(% of GDP)*	38%	42%	45%	29%	17%	78%	77%	44%
Primary balance *(% of GDP)*	0.35%	0.03%	0.10%	0.05%	0.41%	2.57%	0.51%	-0.09%
Tax revenues *(% of GNP)*	13%	14%	15%	15%	14%	13%	18%	16%
Wage tax	7%	7%	5%	8%	7%	5%	7%	7%
Consumption tax	3%	4%	8%	5%	5%	5%	8%	7%
Capital tax	2%	2%	2%	2%	2%	3%	3%	2%
Other Indicators								
Capital output ratio	567%	572%	494%	473%	414%	426%	180%	403%
Interest rate	3.3%	3.3%	3.3%	3.3%	3.3%	3.3%	3.3%	3.3%
Official								
National Income (% of GNP)								
Private consumption	72%	70%	84%	81%	78%	76%	N.A	N.A
Government purchases of goods and services	12%	6%	21%	11%	19%	20%	N.A	N.A
Current account	-4.6%	0.4%	1.7%	1.5%	-5.8%	2.1%	N.A	N.A
Net national saving	19.0%	27.7%	4.6%	8.4%	7.1%	9.5%	N.A	N.A
Government Indicators								
Pension premium to wage	-	-	-	-	9%*	9.9%*	N.A	N.A
Gross public debt *(% of GDP)*	26.3%**	39%**	56%**	23.3%**	16.7%	70.3%	N.A	N.A
Primary balance *(% of GDP)*	N.A	N.A	N.A	N.A	2.7%	2.6%	N.A	N.A
Tax revenues *(% of GNP)*	18%	17%	13%	14%	25%	15%	N.A	N.A

*   ISSA (2006-2008) "Social Security Programs Throughout the World"
**   S&P (2009) "Sovereign Risk Indicators"

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Table 3 Simulation Results – JAPAN

		GNP	GNP per employee	Net national saving-GNP ratio	Capital-labor ratio	Interest rate	Wage rate	Debt-GDP ratio	Pension premium to wage	Pension burden-GDP ratio
Scenario 1	2005	100.00%	100.00%	10.23%	100.00%	3.31%	100.00%	180.21%	11.11%	15.55%
	2010	103.80%	107.72%	16.43%	100.95%	3.25%	100.28%	189.03%	11.71%	16.40%
	2015	106.58%	116.18%	10.43%	101.49%	3.22%	100.45%	210.18%	12.39%	17.35%
	2020	107.91%	122.30%	9.67%	101.82%	3.20%	100.54%	253.55%	12.70%	17.78%
	2030	106.30%	130.12%	7.88%	101.80%	3.20%	100.54%	366.02%	12.46%	17.44%
	2040	102.55%	144.40%	4.13%	101.04%	3.25%	100.31%	514.01%	13.68%	19.15%
	2050	94.56%	155.11%	-2.70%	101.43%	3.23%	100.43%	719.21%	14.80%	20.72%
	2075	57.68%	132.31%	-45.71%	101.78%	3.21%	100.53%	1672.21%	14.39%	20.14%
	2100	0.93%	3.02%	-7833.90%	101.94%	3.20%	100.58%	3690.72%	14.08%	19.71%
Scenario 2	2005	100.05%	100.05%	10.27%	100.00%	3.31%	100.00%	178.29%	11.11%	15.55%
	2010	103.86%	107.78%	16.46%	100.95%	3.25%	100.28%	186.94%	11.71%	16.40%
	2015	106.64%	116.24%	10.46%	101.49%	3.22%	100.44%	207.87%	12.39%	17.35%
	2020	108.00%	122.35%	9.68%	101.82%	3.20%	100.54%	250.94%	12.69%	17.77%
	2030	106.63%	130.04%	7.88%	101.80%	3.20%	100.54%	361.99%	12.43%	17.40%
	2040	103.54%	143.83%	4.17%	101.04%	3.25%	100.31%	505.95%	13.57%	19.00%
	2050	97.07%	153.47%	-2.32%	101.42%	3.23%	100.42%	699.42%	14.49%	20.29%
	2075	72.95%	135.44%	-32.79%	101.75%	3.21%	100.52%	1458.87%	12.73%	17.82%
	2100	53.40%	95.42%	-121.27%	101.88%	3.20%	100.56%	2398.98%	10.42%	14.59%
Scenario 3	2005	100.05%	100.05%	10.27%	100.00%	3.31%	100.00%	178.29%	11.11%	15.55%
	2010	103.86%	107.78%	16.47%	100.95%	3.25%	100.28%	186.94%	11.71%	16.40%
	2015	106.65%	116.24%	10.46%	101.49%	3.22%	100.45%	207.88%	12.39%	17.35%
	2020	108.01%	122.35%	9.69%	101.82%	3.20%	100.54%	250.95%	12.69%	17.77%
	2030	106.63%	130.05%	7.92%	101.80%	3.20%	100.54%	362.01%	12.43%	17.40%
	2040	103.45%	143.94%	4.25%	101.04%	3.25%	100.31%	506.49%	13.59%	19.02%
	2050	96.51%	154.01%	-2.27%	101.42%	3.23%	100.42%	703.14%	14.57%	20.40%
	2075	65.97%	135.29%	-37.62%	101.77%	3.21%	100.53%	1549.31%	13.54%	18.95%
	2100	19.29%	50.12%	-363.29%	101.92%	3.20%	100.57%	3108.43%	12.95%	18.13%

Table 3 Simulation Results – JAPAN (continued)

		GNP	GNP per employee	Net national saving-GNP ratio	Capital-labor ratio	Interest rate	Wage rate	Debt-GDP ratio	Pension premium to wage	Pension burden-GDP ratio
Scenario 4	2005	100.05%	100.05%	10.27%	100.00%	3.31%	100.00%	178.29	11.11%	15.55%
	2010	103.86%	107.78%	16.48%	100.95%	3.25%	100.28%	186.94	11.71%	16.40%
	2015	106.65%	116.25%	10.48%	101.49%	3.22%	100.44%	207.88	12.39%	17.35%
	2020	107.99%	122.38%	9.71%	101.82%	3.20%	100.54%	251.01	12.70%	17.78%
	2030	106.42%	130.21%	7.90%	101.80%	3.20%	100.54%	362.72	12.46%	17.44%
	2040	102.92%	144.32%	4.15%	101.04%	3.25%	100.31%	508.70	13.65%	19.11%
	2050	95.65%	154.49%	-2.55%	101.42%	3.23%	100.42%	707.76	14.67%	20.54%
	2075	66.83%	133.75%	-37.28%	101.76%	3.21%	100.53%	1532.61	13.27%	18.58%
	2100	38.65%	78.09%	-172.91%	101.90%	3.20%	100.57%	2652.50	10.87%	15.22%
Scenario 5	2005	100.05%	100.05%	10.27%	100.00%	3.31%	100.00%	178.29	11.11%	15.55%
	2010	103.86%	107.78%	16.47%	100.95%	3.25%	100.28%	186.94	11.71%	16.40%
	2015	106.65%	116.24%	10.48%	101.49%	3.22%	100.45%	207.88	12.39%	17.35%
	2020	108.00%	122.37%	9.71%	101.82%	3.20%	100.54%	250.98	12.70%	17.77%
	2030	106.51%	130.14%	7.92%	101.80%	3.20%	100.54%	362.42	12.44%	17.42%
	2040	103.11%	144.20%	4.21%	101.04%	3.25%	100.31%	507.96	13.63%	19.08%
	2050	95.88%	154.41%	-2.43%	101.42%	3.23%	100.42%	706.69	14.65%	20.51%
	2075	65.16%	134.30%	-38.49%	101.77%	3.21%	100.53%	1557.24	13.54%	18.96%
	2100	25.14%	59.58%	-274.81%	101.91%	3.20%	100.57%	2950.85	12.07%	16.89%
Scenario 6	2005	100.00%	100.00%	7.43%	100.00%	3.31%	100.00%	179.30	11.12%	15.56%
	2010	103.41%	107.31%	12.92%	100.90%	3.26%	100.27%	187.60	11.72%	16.41%
	2015	105.65%	115.16%	19.28%	101.39%	3.23%	100.42%	202.77	12.41%	17.38%
	2020	108.26%	122.69%	19.03%	101.80%	3.21%	100.54%	217.07	12.72%	17.80%
	2030	109.46%	133.98%	18.57%	101.86%	3.21%	100.55%	259.42	12.47%	17.46%
	2040	109.06%	153.56%	17.17%	101.12%	3.25%	100.33%	317.61	13.69%	19.17%
	2050	105.06%	172.33%	14.40%	101.51%	3.23%	100.45%	401.66	14.81%	20.73%
	2075	82.38%	188.96%	4.16%	101.87%	3.21%	100.56%	812.83	14.39%	20.14%
	2100	51.19%	166.09%	-35.73%	102.03%	3.20%	100.61%	1694.15	14.08%	19.71%

Table 3 Simulation Results – JAPAN (continued)

		GNP	GNP per employee	Net national saving-GNP ratio	Capital-labor ratio	Interest rate	Wage rate	Debt-GDP ratio	Pension premium to wage	Pension burden-GDP ratio
Scenario 7	2005	100.00%	100.00%	5.74%	100.00%	3.32%	100.00%	178.75%	11.12%	15.57%
	2010	103.17%	107.06%	10.77%	100.86%	3.27%	100.26%	186.74%	11.73%	16.42%
	2015	105.07%	114.53%	23.77%	101.34%	3.24%	100.40%	199.07%	12.42%	17.39%
	2020	108.33%	122.77%	23.76%	101.79%	3.21%	100.53%	199.80%	12.73%	17.82%
	2030	110.96%	135.82%	23.83%	101.89%	3.21%	100.56%	208.59%	12.48%	17.48%
	2040	112.28%	158.09%	23.32%	101.16%	3.25%	100.35%	222.79%	13.70%	19.18%
	2050	110.33%	180.98%	21.98%	101.56%	3.23%	100.47%	246.63%	14.82%	20.74%
	2075	94.93%	217.74%	19.73%	101.93%	3.21%	100.57%	385.34%	14.39%	20.14%
	2100	76.84%	249.30%	12.65%	102.09%	3.20%	100.62%	693.17%	14.08%	19.71%
Scenario 8	2005	100.05%	100.05%	5.78%	100.00%	3.32%	100.00%	176.84%	11.12%	15.57%
	2010	103.22%	107.12%	10.80%	100.86%	3.27%	100.26%	184.65%	11.73%	16.42%
	2015	105.13%	114.59%	23.79%	101.34%	3.24%	100.40%	196.76%	12.42%	17.39%
	2020	108.42%	122.83%	23.77%	101.79%	3.21%	100.53%	197.16%	12.72%	17.81%
	2030	111.29%	135.73%	23.83%	101.89%	3.21%	100.56%	204.65%	12.46%	17.44%
	2040	113.31%	157.40%	23.32%	101.16%	3.25%	100.35%	216.07%	13.59%	19.03%
	2050	112.97%	178.60%	22.05%	101.56%	3.23%	100.46%	233.86%	14.51%	20.31%
	2075	111.21%	206.47%	21.09%	101.90%	3.21%	100.57%	308.95%	12.73%	17.83%
	2100	134.10%	239.62%	20.20%	102.03%	3.20%	100.61%	359.44%	10.42%	14.59%

Table 4 Simulation Results – USA

		GNP	GNP per employee	Net national saving-GNP ratio	Capital-labor ratio	Interest rate	Wage rate	Debt-GDP ratio	Pension premium to wage	Pension burden-GDP ratio
Scenario 1	2005	100.00%	100.00%	14.45%	100.00%	3.31%	100.00%	64.40%	8.74%	6.12%
	2010	111.01%	106.19%	15.00%	100.95%	3.25%	100.28%	65.50%	9.04%	6.33%
	2015	123.26%	114.00%	14.77%	101.49%	3.22%	100.45%	65.55%	10.00%	7.00%
	2020	135.11%	122.61%	14.46%	101.82%	3.20%	100.54%	66.67%	11.13%	7.79%
	2030	156.23%	137.60%	14.64%	101.80%	3.20%	100.54%	72.91%	12.15%	8.51%
	2040	177.65%	146.41%	15.50%	101.04%	3.25%	100.31%	81.78%	10.79%	7.56%
	2050	209.09%	160.04%	15.86%	101.43%	3.23%	100.43%	88.48%	10.23%	7.16%
	2075	312.29%	205.80%	15.20%	101.78%	3.21%	100.53%	109.13%	10.61%	7.42%
	2100	466.12%	263.32%	14.47%	101.94%	3.20%	100.58%	134.68%	10.76%	7.53%
Scenario 2	2005	100.00%	100.00%	14.46%	100.00%	3.31%	100.00%	64.22%	8.74%	6.12%
	2010	111.02%	106.19%	15.01%	100.95%	3.25%	100.28%	65.32%	9.04%	6.33%
	2015	123.27%	114.01%	14.78%	101.49%	3.22%	100.44%	65.36%	10.00%	7.00%
	2020	135.11%	122.62%	14.46%	101.82%	3.20%	100.54%	66.48%	11.13%	7.79%
	2030	156.23%	137.61%	14.65%	101.80%	3.20%	100.54%	72.69%	12.15%	8.51%
	2040	177.65%	146.42%	15.51%	101.04%	3.25%	100.31%	81.55%	10.79%	7.56%
	2050	209.07%	160.06%	15.87%	101.42%	3.23%	100.42%	88.23%	10.24%	7.17%
	2075	312.08%	205.85%	15.22%	101.75%	3.21%	100.52%	108.91%	10.61%	7.43%
	2100	465.28%	263.41%	14.49%	101.88%	3.20%	100.56%	134.63%	10.78%	7.55%
Scenario 3	2005	100.00%	100.00%	14.46%	100.00%	3.31%	100.00%	64.22%	8.74%	6.12%
	2010	111.02%	106.19%	15.01%	100.95%	3.25%	100.28%	65.32%	9.04%	6.33%
	2015	123.27%	114.01%	14.78%	101.49%	3.22%	100.45%	65.36%	10.00%	7.00%
	2020	135.11%	122.62%	14.46%	101.82%	3.20%	100.54%	66.48%	11.13%	7.79%
	2030	156.23%	137.61%	14.64%	101.80%	3.20%	100.54%	72.69%	12.15%	8.51%
	2040	177.65%	146.42%	15.50%	101.04%	3.25%	100.31%	81.54%	10.79%	7.56%
	2050	209.08%	160.06%	15.87%	101.42%	3.23%	100.42%	88.23%	10.24%	7.17%
	2075	312.18%	205.84%	15.21%	101.77%	3.21%	100.53%	108.86%	10.61%	7.43%
	2100	465.76%	263.36%	14.48%	101.92%	3.20%	100.57%	134.43%	10.77%	7.54%

Table 4 Simulation Results – USA (continued)

		GNP	GNP per employee	Net national saving-GNP ratio	Capital-labor ratio	Interest rate	Wage rate	Debt-GDP ratio	Pension premium to wage	Pension burden-GDP ratio
Scenario 4	2005	100.00%	100.00%	14.46%	100.00%	3.31%	100.00%	64.22%	8.74%	6.12%
	2010	111.02%	106.19%	15.01%	100.95%	3.25%	100.28%	65.31%	9.04%	6.33%
	2015	123.27%	114.01%	14.78%	101.49%	3.22%	100.44%	65.36%	10.00%	7.00%
	2020	135.11%	122.62%	14.46%	101.82%	3.20%	100.54%	66.48%	11.13%	7.79%
	2030	156.24%	137.61%	14.64%	101.80%	3.20%	100.54%	72.69%	12.15%	8.51%
	2040	177.66%	146.42%	15.50%	101.04%	3.25%	100.31%	81.54%	10.79%	7.56%
	2050	209.09%	160.06%	15.87%	101.42%	3.23%	100.42%	88.22%	10.24%	7.16%
	2075	312.19%	205.84%	15.21%	101.76%	3.21%	100.53%	108.86%	10.61%	7.43%
	2100	465.57%	263.40%	14.49%	101.90%	3.20%	100.57%	134.51%	10.78%	7.54%
Scenario 5	2005	100.00%	100.00%	14.46%	100.00%	3.31%	100.00%	64.22%	8.74%	6.12%
	2010	111.02%	106.19%	15.01%	100.95%	3.25%	100.28%	65.32%	9.04%	6.33%
	2015	123.27%	114.01%	14.78%	101.49%	3.22%	100.45%	65.36%	10.00%	7.00%
	2020	135.11%	122.62%	14.46%	101.82%	3.20%	100.54%	66.48%	11.13%	7.79%
	2030	156.24%	137.61%	14.64%	101.80%	3.20%	100.54%	72.69%	12.15%	8.51%
	2040	177.66%	146.42%	15.50%	101.04%	3.25%	100.31%	81.54%	10.79%	7.56%
	2050	209.09%	160.06%	15.87%	101.42%	3.23%	100.42%	88.22%	10.24%	7.16%
	2075	312.20%	205.84%	15.21%	101.77%	3.21%	100.53%	108.86%	10.61%	7.43%
	2100	465.72%	263.38%	14.49%	101.91%	3.20%	100.57%	134.45%	10.77%	7.54%
Scenario 6	2005	100.00%	100.00%	14.50%	100.00%	3.31%	100.00%	64.46%	8.74%	6.12%
	2010	111.00%	106.18%	15.03%	100.84%	3.26%	100.27%	65.58%	9.05%	6.34%
	2015	123.24%	113.98%	14.77%	101.30%	3.23%	100.42%	65.64%	10.02%	7.01%
	2020	135.10%	122.60%	14.43%	101.68%	3.21%	100.54%	66.74%	11.14%	7.80%
	2030	156.23%	137.60%	14.61%	101.73%	3.21%	100.55%	72.95%	12.17%	8.52%
	2040	177.64%	146.41%	15.47%	101.04%	3.25%	100.33%	81.82%	10.80%	7.56%
	2050	209.08%	160.04%	15.85%	101.41%	3.23%	100.45%	88.51%	10.24%	7.17%
	2075	312.27%	205.79%	15.20%	101.75%	3.21%	100.56%	109.17%	10.61%	7.42%
	2100	466.10%	263.31%	14.47%	101.90%	3.20%	100.61%	134.74%	10.76%	7.53%

Table 4 Simulation Results – USA (continued)

		GNP	GNP per employee	Net national saving-GNP ratio	Capital-labor ratio	Interest rate	Wage rate	Debt-GDP ratio	Pension premium to wage	Pension burden-GDP ratio
Scenario 7	2005	100.00%	100.00%	14.52%	100.00%	3.32%	100.00%	64.50%	8.75%	6.12%
	2010	111.00%	106.17%	15.05%	100.86%	3.27%	100.26%	65.62%	9.06%	6.34%
	2015	123.22%	113.96%	14.77%	101.34%	3.24%	100.40%	65.69%	10.02%	7.02%
	2020	135.09%	122.60%	14.42%	101.79%	3.21%	100.53%	66.78%	11.15%	7.81%
	2030	156.23%	137.60%	14.59%	101.89%	3.21%	100.56%	72.98%	12.18%	8.52%
	2040	177.64%	146.40%	15.46%	101.16%	3.25%	100.35%	81.84%	10.81%	7.57%
	2050	209.08%	160.03%	15.84%	101.56%	3.23%	100.47%	88.53%	10.24%	7.17%
	2075	312.26%	205.79%	15.20%	101.93%	3.21%	100.57%	109.20%	10.61%	7.42%
	2100	466.08%	263.30%	14.47%	102.09%	3.20%	100.62%	134.77%	10.76%	7.53%
Scenario 8	2005	100.00%	100.00%	14.53%	100.00%	3.32%	100.00%	64.32%	8.75%	6.12%
	2010	111.00%	106.18%	15.06%	100.86%	3.27%	100.26%	65.44%	9.06%	6.34%
	2015	123.23%	113.97%	14.78%	101.34%	3.24%	100.40%	65.50%	10.02%	7.02%
	2020	135.10%	122.60%	14.43%	101.79%	3.21%	100.53%	66.58%	11.15%	7.81%
	2030	156.23%	137.61%	14.59%	101.89%	3.21%	100.56%	72.77%	12.18%	8.52%
	2040	177.64%	146.42%	15.47%	101.16%	3.25%	100.35%	81.61%	10.81%	7.57%
	2050	209.06%	160.05%	15.85%	101.56%	3.23%	100.46%	88.29%	10.24%	7.17%
	2075	312.06%	205.84%	15.22%	101.90%	3.21%	100.57%	108.98%	10.62%	7.43%
	2100	465.24%	263.39%	14.49%	102.03%	3.20%	100.61%	134.72%	10.78%	7.55%

Table 5 Simulation Results – CHINA

		GNP	GNP per employee	Net national saving-GNP ratio	Capital-labor ratio	Interest rate	Wage rate	Debt-GDP ratio	Pension premium to wage	Pension burden-GDP ratio
Scenario 1	2005	100.00%	100.00%	23.59%	100.00%	3.31%	100.00%	12.47%	0.00%	0.00%
	2010	112.08%	107.21%	22.73%	100.88%	3.25%	100.22%	18.40%	0.00%	0.00%
	2015	124.25%	116.34%	22.10%	101.39%	3.22%	100.35%	18.39%	0.00%	0.00%
	2020	135.05%	126.55%	21.46%	101.70%	3.20%	100.42%	18.23%	0.00%	0.00%
	2030	150.21%	152.44%	20.58%	101.68%	3.20%	100.42%	17.73%	0.00%	0.00%
	2040	158.15%	169.53%	20.17%	100.97%	3.25%	100.24%	16.65%	0.00%	0.00%
	2050	162.84%	188.45%	20.40%	101.33%	3.23%	100.33%	16.05%	0.00%	0.00%
	2075	171.66%	241.32%	20.25%	101.66%	3.21%	100.41%	11.71%	0.00%	0.00%
	2100	179.66%	310.34%	20.29%	101.81%	3.20%	100.45%	4.63%	0.00%	0.00%
Scenario 2	2005	100.00%	100.00%	23.59%	100.00%	3.31%	100.00%	12.32%	0.00%	0.00%
	2010	112.09%	107.22%	22.74%	100.88%	3.25%	100.22%	18.25%	0.00%	0.00%
	2015	124.25%	116.34%	22.10%	101.39%	3.22%	100.35%	18.24%	0.00%	0.00%
	2020	135.06%	126.55%	21.47%	101.69%	3.20%	100.42%	18.07%	0.00%	0.00%
	2030	150.21%	152.45%	20.58%	101.68%	3.20%	100.42%	17.55%	0.00%	0.00%
	2040	158.13%	169.55%	20.18%	100.97%	3.25%	100.24%	16.43%	0.00%	0.00%
	2050	162.78%	188.52%	20.41%	101.32%	3.23%	100.33%	15.76%	0.00%	0.00%
	2075	171.22%	241.66%	20.25%	101.64%	3.21%	100.41%	11.13%	0.00%	0.00%
	2100	178.14%	311.32%	20.28%	101.76%	3.20%	100.44%	3.31%	0.00%	0.00%
Scenario 3	2005	100.00%	100.00%	23.59%	100.00%	3.31%	100.00%	12.32%	0.00%	0.00%
	2010	112.09%	107.22%	22.74%	100.88%	3.25%	100.22%	18.25%	0.00%	0.00%
	2015	124.25%	116.34%	22.10%	101.39%	3.22%	100.35%	18.24%	0.00%	0.00%
	2020	135.06%	126.55%	21.47%	101.69%	3.20%	100.42%	18.07%	0.00%	0.00%
	2030	150.21%	152.45%	20.58%	101.68%	3.20%	100.42%	17.55%	0.00%	0.00%
	2040	158.14%	169.55%	20.18%	100.97%	3.25%	100.24%	16.43%	0.00%	0.00%
	2050	162.80%	188.51%	20.41%	101.33%	3.23%	100.33%	15.76%	0.00%	0.00%
	2075	171.41%	241.50%	20.25%	101.65%	3.21%	100.41%	11.15%	0.00%	0.00%
	2100	179.06%	310.63%	20.30%	101.79%	3.20%	100.44%	3.53%	0.00%	0.00%

Table 5 Simulation Results – CHINA (continued)

		GNP	GNP per employee	Net national saving-GNP ratio	Capital-labor ratio	Interest rate	Wage rate	Debt-GDP ratio	Pension premium to wage	Pension burden-GDP ratio
Scenario 4	2005	100.00%	100.00%	23.59%	100.00%	3.31%	100.00%	12.32%	0.00%	0.00%
	2010	112.09%	107.22%	22.74%	100.88%	3.25%	100.22%	18.25%	0.00%	0.00%
	2015	124.25%	116.34%	22.10%	101.39%	3.22%	100.35%	18.24%	0.00%	0.00%
	2020	135.06%	126.55%	21.47%	101.70%	3.20%	100.42%	18.07%	0.00%	0.00%
	2030	150.21%	152.45%	20.58%	101.68%	3.20%	100.42%	17.55%	0.00%	0.00%
	2040	158.15%	169.54%	20.18%	100.97%	3.25%	100.24%	16.42%	0.00%	0.00%
	2050	162.83%	188.49%	20.41%	101.33%	3.23%	100.33%	15.76%	0.00%	0.00%
	2075	171.41%	241.56%	20.25%	101.64%	3.21%	100.41%	11.15%	0.00%	0.00%
	2100	178.58%	311.17%	20.28%	101.77%	3.20%	100.44%	3.43%	0.00%	0.00%
Scenario 5	2005	100.00%	100.00%	23.59%	100.00%	3.31%	100.00%	12.32%	0.00%	0.00%
	2010	112.09%	107.22%	22.74%	100.88%	3.25%	100.22%	18.25%	0.00%	0.00%
	2015	124.25%	116.34%	22.10%	101.39%	3.22%	100.35%	18.24%	0.00%	0.00%
	2020	135.06%	126.55%	21.47%	101.69%	3.20%	100.42%	18.07%	0.00%	0.00%
	2030	150.21%	152.45%	20.58%	101.68%	3.20%	100.42%	17.55%	0.00%	0.00%
	2040	158.15%	169.55%	20.18%	100.97%	3.25%	100.24%	16.43%	0.00%	0.00%
	2050	162.82%	188.49%	20.41%	101.33%	3.23%	100.33%	15.76%	0.00%	0.00%
	2075	171.45%	241.51%	20.25%	101.65%	3.21%	100.41%	11.17%	0.00%	0.00%
	2100	178.92%	310.86%	20.29%	101.78%	3.20%	100.44%	3.53%	0.00%	0.00%
Scenario 6	2005	100.00%	100.00%	23.63%	100.00%	3.31%	100.00%	12.55%	0.00%	0.00%
	2010	112.08%	107.21%	22.77%	100.90%	3.26%	100.21%	18.47%	0.00%	0.00%
	2015	124.25%	116.34%	22.12%	101.39%	3.23%	100.32%	18.43%	0.00%	0.00%
	2020	135.06%	126.56%	21.46%	101.80%	3.21%	100.42%	18.21%	0.00%	0.00%
	2030	150.21%	152.44%	20.55%	101.86%	3.21%	100.43%	17.60%	0.00%	0.00%
	2040	158.15%	169.53%	20.16%	101.12%	3.25%	100.26%	16.40%	0.00%	0.00%
	2050	162.84%	188.45%	20.40%	101.51%	3.23%	100.35%	15.68%	0.00%	0.00%
	2075	171.66%	241.33%	20.26%	101.87%	3.21%	100.43%	11.01%	0.00%	0.00%
	2100	179.69%	310.39%	20.31%	102.03%	3.20%	100.47%	3.37%	0.00%	0.00%

Table 5 Simulation Results – CHINA (continued)

		GNP	GNP per employee	Net national saving-GNP ratio	Capital-labor ratio	Interest rate	Wage rate	Debt-GDP ratio	Pension premium to wage	Pension burden-GDP ratio
Scenario 7	2005	100.00%	100.00%	23.66%	100.00%	3.32%	100.00%	12.59%	0.00%	15.57%
	2010	112.09%	107.21%	22.80%	100.81%	3.27%	100.20%	18.51%	0.00%	16.42%
	2015	124.25%	116.34%	22.13%	101.25%	3.24%	100.31%	18.44%	0.00%	17.39%
	2020	135.06%	126.56%	21.45%	101.67%	3.21%	100.42%	18.20%	0.00%	17.82%
	2030	150.22%	152.45%	20.54%	101.76%	3.21%	100.44%	17.52%	0.00%	17.48%
	2040	158.15%	169.53%	20.15%	101.08%	3.25%	100.27%	16.25%	0.00%	19.18%
	2050	162.84%	188.45%	20.39%	101.46%	3.23%	100.36%	15.46%	0.00%	20.74%
	2075	171.67%	241.33%	20.27%	101.80%	3.21%	100.45%	10.57%	0.00%	20.14%
	2100	179.71%	310.42%	20.33%	101.95%	3.20%	100.48%	2.58%	0.00%	19.71%
Scenario 8	2005	100.00%	100.00%	23.66%	100.00%	3.32%	100.00%	12.45%	0.00%	15.57%
	2010	112.09%	107.22%	22.80%	100.81%	3.27%	100.20%	18.37%	0.00%	16.42%
	2015	124.25%	116.35%	22.14%	101.25%	3.24%	100.31%	18.29%	0.00%	17.39%
	2020	135.07%	126.57%	21.46%	101.67%	3.21%	100.42%	18.04%	0.00%	17.82%
	2030	150.22%	152.46%	20.54%	101.76%	3.21%	100.44%	17.34%	0.00%	17.48%
	2040	158.14%	169.56%	20.15%	101.08%	3.25%	100.27%	16.03%	0.00%	19.18%
	2050	162.78%	188.51%	20.40%	101.45%	3.23%	100.36%	15.18%	0.00%	20.74%
	2075	171.22%	241.67%	20.27%	101.77%	3.21%	100.44%	10.01%	0.00%	20.14%
	2100	178.19%	311.40%	20.32%	101.89%	3.20%	100.47%	1.29%	0.00%	19.71%

Table 6 Simulation Results – SOUTH KOREA

		GNP	GNP per employee	Net national saving-GNP ratio	Capital-labor ratio	Interest rate	Wage rate	Debt-GDP ratio	Pension premium to wage	Pension burden-GDP ratio
Scenario 1	2005	100.00%	100.00%	18.69%	100.00%	3.31%	100.00%	24.69%	10.03%	14.05%
	2010	109.77%	107.94%	21.46%	100.95%	3.25%	100.28%	28.93%	10.65%	14.90%
	2015	119.24%	118.29%	22.18%	101.49%	3.22%	100.45%	28.90%	8.82%	12.35%
	2020	128.06%	132.03%	22.85%	101.82%	3.20%	100.54%	28.14%	6.80%	9.52%
	2030	140.30%	165.98%	22.90%	101.80%	3.20%	100.54%	28.75%	8.60%	12.04%
	2040	139.83%	195.33%	23.03%	101.04%	3.25%	100.31%	35.77%	9.54%	13.35%
	2050	132.82%	220.14%	23.07%	101.43%	3.23%	100.43%	49.12%	9.90%	13.86%
	2075	104.78%	278.19%	23.08%	101.78%	3.21%	100.53%	125.56%	10.17%	14.24%
	2100	80.61%	342.57%	20.45%	101.94%	3.20%	100.58%	313.52%	10.29%	14.40%
Scenario 2	2005	100.00%	100.00%	18.69%	100.00%	3.31%	100.00%	24.55%	10.03%	14.05%
	2010	109.77%	107.94%	21.47%	100.95%	3.25%	100.28%	28.80%	10.65%	14.90%
	2015	119.24%	118.30%	22.19%	101.49%	3.22%	100.44%	28.76%	8.82%	12.35%
	2020	128.05%	132.05%	22.87%	101.82%	3.20%	100.54%	28.00%	6.80%	9.52%
	2030	140.14%	166.19%	22.92%	101.80%	3.20%	100.54%	28.65%	8.61%	12.05%
	2040	139.25%	196.21%	23.06%	101.04%	3.25%	100.31%	35.82%	9.58%	13.41%
	2050	131.32%	222.69%	23.09%	101.42%	3.23%	100.42%	49.69%	10.02%	14.02%
	2075	97.54%	292.89%	22.98%	101.75%	3.21%	100.52%	136.10%	10.76%	15.07%
	2100	61.63%	386.34%	19.33%	101.88%	3.20%	100.56%	407.55%	11.86%	16.61%
Scenario 3	2005	100.00%	100.00%	18.69%	100.00%	3.31%	100.00%	24.55%	10.03%	14.05%
	2010	109.77%	107.94%	21.46%	100.95%	3.25%	100.28%	28.80%	10.65%	14.90%
	2015	119.24%	118.30%	22.19%	101.49%	3.22%	100.45%	28.77%	8.82%	12.35%
	2020	128.05%	132.05%	22.87%	101.82%	3.20%	100.54%	28.00%	6.80%	9.52%
	2030	140.14%	166.18%	22.91%	101.80%	3.20%	100.54%	28.64%	8.61%	12.05%
	2040	139.32%	196.08%	23.03%	101.04%	3.25%	100.31%	35.77%	9.57%	13.40%
	2050	131.72%	221.92%	23.06%	101.42%	3.23%	100.42%	49.43%	9.98%	13.98%
	2075	100.96%	283.48%	22.99%	101.77%	3.21%	100.53%	130.61%	10.41%	14.58%
	2100	73.82%	347.43%	20.11%	101.92%	3.20%	100.57%	341.87%	10.57%	14.80%

Table 6 Simulation Results –SOUTH KOREA (continued)

		GNP	GNP per employee	Net national saving-GNP ratio	Capital-labor ratio	Interest rate	Wage rate	Debt-GDP ratio	Pension premium to wage	Pension burden-GDP ratio
Scenario 4	2005	100.00%	100.00%	18.69%	100.00%	3.31%	100.00%	24.55%	10.03%	14.05%
	2010	109.77%	107.94%	21.46%	100.95%	3.25%	100.28%	28.79%	10.65%	14.90%
	2015	119.24%	118.30%	22.19%	101.49%	3.22%	100.44%	28.76%	8.82%	12.35%
	2020	128.07%	132.04%	22.86%	101.82%	3.20%	100.54%	27.98%	6.80%	9.52%
	2030	140.29%	166.02%	22.92%	101.80%	3.20%	100.54%	28.58%	8.60%	12.04%
	2040	139.66%	195.64%	23.06%	101.04%	3.25%	100.31%	35.64%	9.55%	13.37%
	2050	132.16%	221.36%	23.11%	101.42%	3.23%	100.42%	49.20%	9.95%	13.93%
	2075	100.17%	289.11%	23.04%	101.76%	3.21%	100.53%	131.76%	10.60%	14.84%
	2100	65.77%	381.38%	19.63%	101.90%	3.20%	100.57%	381.71%	11.64%	16.29%
Scenario 5	2005	100.00%	100.00%	18.69%	100.00%	3.31%	100.00%	24.55%	10.03%	14.05%
	2010	109.77%	107.94%	21.46%	100.95%	3.25%	100.28%	28.80%	10.65%	14.90%
	2015	119.24%	118.30%	22.19%	101.49%	3.22%	100.45%	28.76%	8.82%	12.35%
	2020	128.06%	132.05%	22.86%	101.82%	3.20%	100.54%	27.99%	6.80%	9.52%
	2030	140.22%	166.09%	22.91%	101.80%	3.20%	100.54%	28.61%	8.60%	12.04%
	2040	139.54%	195.78%	23.05%	101.04%	3.25%	100.31%	35.68%	9.56%	13.38%
	2050	132.08%	221.41%	23.08%	101.42%	3.23%	100.42%	49.25%	9.96%	13.94%
	2075	101.10%	285.29%	23.03%	101.77%	3.21%	100.53%	130.38%	10.46%	14.65%
	2100	70.67%	362.07%	19.91%	101.91%	3.20%	100.57%	356.23%	11.04%	15.46%
Scenario 6	2005	100.00%	100.00%	18.72%	100.00%	3.31%	100.00%	24.74%	10.04%	14.06%
	2010	109.76%	107.93%	21.48%	100.84%	3.26%	100.27%	28.99%	10.66%	14.92%
	2015	119.21%	118.27%	22.18%	101.30%	3.23%	100.42%	28.94%	8.84%	12.37%
	2020	128.06%	132.03%	22.83%	101.68%	3.21%	100.54%	28.14%	6.81%	9.53%
	2030	140.30%	165.99%	22.87%	101.73%	3.21%	100.55%	28.70%	8.61%	12.05%
	2040	139.84%	195.34%	23.01%	101.04%	3.25%	100.33%	35.68%	9.55%	13.36%
	2050	132.82%	220.14%	23.06%	101.41%	3.23%	100.45%	48.98%	9.90%	13.86%
	2075	104.78%	278.20%	23.09%	101.75%	3.21%	100.56%	125.26%	10.17%	14.24%
	2100	80.63%	342.64%	20.47%	101.90%	3.20%	100.61%	312.85%	10.29%	14.40%

Table 6 Simulation Results –SOUTH KOREA (continued)

		GNP	GNP per employee	Net national saving-GNP ratio	Capital-labor ratio	Interest rate	Wage rate	Debt-GDP ratio	Pension premium to wage	Pension burden-GDP ratio
Scenario 7	2005	100.00%	100.00%	18.74%	100.00%	3.32%	100.00%	24.76%	10.04%	14.06%
	2010	109.75%	107.92%	21.50%	100.86%	3.27%	100.26%	29.01%	10.66%	14.93%
	2015	119.20%	118.26%	22.18%	101.34%	3.24%	100.40%	28.96%	8.85%	12.38%
	2020	128.05%	132.03%	22.82%	101.79%	3.21%	100.53%	28.14%	6.81%	9.54%
	2030	140.31%	165.99%	22.85%	101.89%	3.21%	100.56%	28.67%	8.61%	12.06%
	2040	139.84%	195.34%	22.99%	101.16%	3.25%	100.35%	35.62%	9.55%	13.37%
	2050	132.82%	220.14%	23.05%	101.56%	3.23%	100.47%	48.89%	9.91%	13.87%
	2075	104.78%	278.21%	23.10%	101.93%	3.21%	100.57%	125.05%	10.17%	14.24%
	2100	80.64%	342.67%	20.48%	102.09%	3.20%	100.62%	312.35%	10.29%	14.40%
Scenario 8	2005	100.00%	100.00%	18.75%	100.00%	3.32%	100.00%	24.63%	10.04%	14.06%
	2010	109.75%	107.93%	21.50%	100.86%	3.27%	100.26%	28.88%	10.66%	14.93%
	2015	119.21%	118.26%	22.20%	101.34%	3.24%	100.40%	28.83%	8.85%	12.38%
	2020	128.04%	132.05%	22.84%	101.79%	3.21%	100.53%	28.01%	6.81%	9.54%
	2030	140.15%	166.20%	22.87%	101.89%	3.21%	100.56%	28.58%	8.62%	12.07%
	2040	139.25%	196.22%	23.02%	101.16%	3.25%	100.35%	35.68%	9.59%	13.43%
	2050	131.33%	222.69%	23.07%	101.56%	3.23%	100.46%	49.47%	10.02%	14.03%
	2075	97.55%	292.92%	23.00%	101.90%	3.21%	100.57%	135.60%	10.76%	15.07%
	2100	61.65%	386.49%	19.37%	102.03%	3.20%	100.61%	406.22%	11.86%	16.61%

Table 7 Simulation Results –INDIA

		GNP	GNP per employee	Net national saving-GNP ratio	Capital-labor ratio	Interest rate	Wage rate	Debt-GDP ratio	Pension premium to wage	Pension burden-GDP ratio
Scenario 1	2005	100.00%	100.00%	15.38%	100.00%	3.31%	100.00%	58.20%	0.00%	0.00%
	2010	116.34%	106.04%	15.18%	100.88%	3.25%	100.22%	58.20%	0.00%	0.00%
	2015	134.08%	112.49%	15.15%	101.39%	3.22%	100.35%	58.24%	0.00%	0.00%
	2020	152.18%	118.97%	15.08%	101.70%	3.20%	100.42%	59.07%	0.00%	0.00%
	2030	189.50%	133.43%	14.87%	101.68%	3.20%	100.42%	62.71%	0.00%	0.00%
	2040	231.73%	148.86%	14.45%	100.97%	3.25%	100.24%	67.07%	0.00%	0.00%
	2050	279.45%	165.48%	14.13%	101.33%	3.23%	100.33%	72.22%	0.00%	0.00%
	2075	437.01%	210.46%	13.76%	101.66%	3.21%	100.41%	88.23%	0.00%	0.00%
	2100	685.17%	268.34%	13.34%	101.81%	3.20%	100.45%	107.31%	0.00%	0.00%
Scenario 2	2005	100.01%	100.01%	15.39%	100.00%	3.31%	100.00%	57.97%	0.00%	0.00%
	2010	116.34%	106.05%	15.19%	100.88%	3.25%	100.22%	57.97%	0.00%	0.00%
	2015	134.09%	112.50%	15.15%	101.39%	3.22%	100.35%	58.02%	0.00%	0.00%
	2020	152.19%	118.98%	15.08%	101.69%	3.20%	100.42%	58.85%	0.00%	0.00%
	2030	189.52%	133.44%	14.88%	101.68%	3.20%	100.42%	62.48%	0.00%	0.00%
	2040	231.74%	148.87%	14.45%	100.97%	3.25%	100.24%	66.83%	0.00%	0.00%
	2050	279.47%	165.49%	14.14%	101.32%	3.23%	100.33%	71.97%	0.00%	0.00%
	2075	437.02%	210.48%	13.78%	101.64%	3.21%	100.41%	87.95%	0.00%	0.00%
	2100	685.12%	268.36%	13.37%	101.76%	3.20%	100.44%	107.01%	0.00%	0.00%
Scenario 3	2005	100.01%	100.01%	15.39%	100.00%	3.31%	100.00%	57.97%	0.00%	0.00%
	2010	116.34%	106.05%	15.19%	100.88%	3.25%	100.22%	57.97%	0.00%	0.00%
	2015	134.09%	112.50%	15.15%	101.39%	3.22%	100.35%	58.02%	0.00%	0.00%
	2020	152.19%	118.98%	15.08%	101.69%	3.20%	100.42%	58.85%	0.00%	0.00%
	2030	189.51%	133.44%	14.88%	101.68%	3.20%	100.42%	62.48%	0.00%	0.00%
	2040	231.74%	148.86%	14.45%	100.97%	3.25%	100.24%	66.83%	0.00%	0.00%
	2050	279.47%	165.49%	14.14%	101.33%	3.23%	100.33%	71.97%	0.00%	0.00%
	2075	437.03%	210.47%	13.77%	101.65%	3.21%	100.41%	87.93%	0.00%	0.00%
	2100	685.18%	268.36%	13.35%	101.79%	3.20%	100.44%	106.96%	0.00%	0.00%

Table 7 Simulation Results – INDIA (continued)

		GNP	GNP per employee	Net national saving-GNP ratio	Capital-labor ratio	Interest rate	Wage rate	Debt-GDP ratio	Pension premium to wage	Pension burden-GDP ratio
Scenario 4	2005	100.01%	100.01%	15.39%	100.00%	3.31%	100.00%	57.97%	0.00%	0.00%
	2010	116.34%	106.05%	15.19%	100.88%	3.25%	100.22%	57.97%	0.00%	0.00%
	2015	134.09%	112.50%	15.15%	101.39%	3.22%	100.35%	58.02%	0.00%	0.00%
	2020	152.19%	118.98%	15.08%	101.70%	3.20%	100.42%	58.85%	0.00%	0.00%
	2030	189.52%	133.44%	14.88%	101.68%	3.20%	100.42%	62.47%	0.00%	0.00%
	2040	231.74%	148.86%	14.45%	100.97%	3.25%	100.24%	66.83%	0.00%	0.00%
	2050	279.47%	165.49%	14.14%	101.33%	3.23%	100.33%	71.97%	0.00%	0.00%
	2075	437.03%	210.48%	13.78%	101.64%	3.21%	100.41%	87.94%	0.00%	0.00%
	2100	685.15%	268.36%	13.36%	101.77%	3.20%	100.44%	106.99%	0.00%	0.00%
Scenario 5	2005	100.01%	100.01%	15.39%	100.00%	3.31%	100.00%	57.97%	0.00%	0.00%
	2010	116.34%	106.05%	15.19%	100.88%	3.25%	100.22%	57.97%	0.00%	0.00%
	2015	134.09%	112.50%	15.15%	101.39%	3.22%	100.35%	58.02%	0.00%	0.00%
	2020	152.19%	118.98%	15.08%	101.69%	3.20%	100.42%	58.85%	0.00%	0.00%
	2030	189.52%	133.44%	14.88%	101.68%	3.20%	100.42%	62.47%	0.00%	0.00%
	2040	231.74%	148.86%	14.45%	100.97%	3.25%	100.24%	66.83%	0.00%	0.00%
	2050	279.47%	165.49%	14.14%	101.33%	3.23%	100.33%	71.96%	0.00%	0.00%
	2075	437.04%	210.47%	13.77%	101.65%	3.21%	100.41%	87.93%	0.00%	0.00%
	2100	685.18%	268.36%	13.36%	101.78%	3.20%	100.44%	106.97%	0.00%	0.00%
Scenario 6	2005	100.00%	100.00%	15.43%	100.00%	3.31%	100.00%	58.28%	0.00%	0.00%
	2010	116.33%	106.04%	15.22%	100.84%	3.26%	100.21%	58.29%	0.00%	0.00%
	2015	134.07%	112.48%	15.16%	101.30%	3.23%	100.32%	58.33%	0.00%	0.00%
	2020	152.18%	118.97%	15.07%	101.68%	3.21%	100.42%	59.13%	0.00%	0.00%
	2030	189.51%	133.43%	14.85%	101.73%	3.21%	100.43%	62.71%	0.00%	0.00%
	2040	231.73%	148.86%	14.43%	101.04%	3.25%	100.26%	67.04%	0.00%	0.00%
	2050	279.45%	165.48%	14.12%	101.41%	3.23%	100.35%	72.17%	0.00%	0.00%
	2075	437.01%	210.46%	13.76%	101.75%	3.21%	100.43%	88.16%	0.00%	0.00%
	2100	685.17%	268.34%	13.34%	101.90%	3.20%	100.47%	107.22%	0.00%	0.00%

Table 7 Simulation Results – INDIA (continued)

		GNP	GNP per employee	Net national saving-GNP ratio	Capital-labor ratio	Interest rate	Wage rate	Debt-GDP ratio	Pension premium to wage	Pension burden-GDP ratio
Scenario 7	2005	100.00%	100.00%	15.45%	100.00%	3.32%	100.00%	58.33%	0.00%	0.00%
	2010	116.32%	106.03%	15.24%	100.81%	3.27%	100.20%	58.35%	0.00%	0.00%
	2015	134.05%	112.47%	15.16%	101.25%	3.24%	100.31%	58.39%	0.00%	0.00%
	2020	152.18%	118.97%	15.06%	101.67%	3.21%	100.42%	59.16%	0.00%	0.00%
	2030	189.51%	133.44%	14.84%	101.76%	3.21%	100.44%	62.71%	0.00%	0.00%
	2040	231.73%	148.86%	14.43%	101.08%	3.25%	100.27%	67.03%	0.00%	0.00%
	2050	279.45%	165.48%	14.12%	101.46%	3.23%	100.36%	72.14%	0.00%	0.00%
	2075	437.01%	210.46%	13.76%	101.80%	3.21%	100.45%	88.12%	0.00%	0.00%
	2100	685.17%	268.34%	13.35%	101.95%	3.20%	100.48%	107.17%	0.00%	0.00%
Scenario 8	2005	100.01%	100.01%	15.46%	100.00%	3.32%	100.00%	58.10%	0.00%	0.00%
	2010	116.33%	106.04%	15.25%	100.81%	3.27%	100.20%	58.12%	0.00%	0.00%
	2015	134.06%	112.47%	15.17%	101.25%	3.24%	100.31%	58.16%	0.00%	0.00%
	2020	152.19%	118.97%	15.07%	101.67%	3.21%	100.42%	58.94%	0.00%	0.00%
	2030	189.52%	133.44%	14.85%	101.76%	3.21%	100.44%	62.48%	0.00%	0.00%
	2040	231.74%	148.87%	14.44%	101.08%	3.25%	100.27%	66.78%	0.00%	0.00%
	2050	279.47%	165.50%	14.13%	101.45%	3.23%	100.36%	71.89%	0.00%	0.00%
	2075	437.02%	210.48%	13.78%	101.77%	3.21%	100.44%	87.83%	0.00%	0.00%
	2100	685.12%	268.36%	13.37%	101.89%	3.20%	100.47%	106.87%	0.00%	0.00%

Table 8 Simulation Results – INDONESIA

		GNP	GNP per employee	Net national saving-GNP ratio	Capital-labor ratio	Interest rate	Wage rate	Debt-GDP ratio	Pension premium to wage	Pension burden-GDP ratio
Scenario 1	2005	100.00%	100.00%	28.02%	100.00%	3.31%	100.00%	34.00%	0.00%	0.00%
	2010	113.86%	106.39%	28.05%	100.88%	3.25%	100.22%	34.00%	0.00%	0.00%
	2015	128.55%	114.79%	27.86%	101.39%	3.22%	100.35%	34.00%	0.00%	0.00%
	2020	143.74%	124.80%	27.48%	101.70%	3.20%	100.42%	34.10%	0.00%	0.00%
	2030	172.78%	146.81%	26.83%	101.68%	3.20%	100.42%	35.07%	0.00%	0.00%
	2040	198.58%	168.06%	26.27%	100.97%	3.25%	100.24%	37.02%	0.00%	0.00%
	2050	221.50%	186.14%	25.97%	101.33%	3.23%	100.33%	40.00%	0.00%	0.00%
	2075	288.51%	236.94%	25.80%	101.66%	3.21%	100.41%	50.24%	0.00%	0.00%
	2100	375.69%	302.46%	25.53%	101.81%	3.20%	100.45%	65.19%	0.00%	0.00%
Scenario 2	2005	100.01%	100.01%	28.03%	100.00%	3.31%	100.00%	33.64%	0.00%	0.00%
	2010	113.87%	106.40%	28.05%	100.88%	3.25%	100.22%	33.64%	0.00%	0.00%
	2015	128.57%	114.80%	27.87%	101.39%	3.22%	100.35%	33.64%	0.00%	0.00%
	2020	143.75%	124.82%	27.49%	101.69%	3.20%	100.42%	33.73%	0.00%	0.00%
	2030	172.80%	146.83%	26.84%	101.68%	3.20%	100.42%	34.67%	0.00%	0.00%
	2040	198.60%	168.08%	26.28%	100.97%	3.25%	100.24%	36.58%	0.00%	0.00%
	2050	221.51%	186.17%	25.98%	101.32%	3.23%	100.33%	39.49%	0.00%	0.00%
	2075	288.47%	237.03%	25.82%	101.64%	3.21%	100.41%	49.51%	0.00%	0.00%
	2100	375.44%	302.65%	25.56%	101.76%	3.20%	100.44%	64.16%	0.00%	0.00%
Scenario 3	2005	100.01%	100.01%	28.03%	100.00%	3.31%	100.00%	33.64%	0.00%	0.00%
	2010	113.87%	106.40%	28.05%	100.88%	3.25%	100.22%	33.64%	0.00%	0.00%
	2015	128.57%	114.80%	27.87%	101.39%	3.22%	100.35%	33.64%	0.00%	0.00%
	2020	143.75%	124.82%	27.49%	101.69%	3.20%	100.42%	33.73%	0.00%	0.00%
	2030	172.80%	146.83%	26.84%	101.68%	3.20%	100.42%	34.67%	0.00%	0.00%
	2040	198.60%	168.08%	26.28%	100.97%	3.25%	100.24%	36.58%	0.00%	0.00%
	2050	221.51%	186.17%	25.98%	101.33%	3.23%	100.33%	39.49%	0.00%	0.00%
	2075	288.50%	237.01%	25.81%	101.65%	3.21%	100.41%	49.50%	0.00%	0.00%
	2100	375.63%	302.57%	25.55%	101.79%	3.20%	100.44%	64.13%	0.00%	0.00%

Table 8 Simulation Results – INDONESIA (continued)

		GNP	GNP per employee	Net national saving-GNP ratio	Capital-labor ratio	Interest rate	Wage rate	Debt-GDP ratio	Pension premium to wage	Pension burden-GDP ratio
Scenario 4	2005	100.01%	100.01%	28.03%	100.00%	3.31%	100.00%	33.64%	0.00%	0.00%
	2010	113.87%	106.40%	28.05%	100.88%	3.25%	100.22%	33.64%	0.00%	0.00%
	2015	128.57%	114.80%	27.87%	101.39%	3.22%	100.35%	33.64%	0.00%	0.00%
	2020	143.75%	124.82%	27.49%	101.70%	3.20%	100.42%	33.73%	0.00%	0.00%
	2030	172.80%	146.82%	26.84%	101.68%	3.20%	100.42%	34.67%	0.00%	0.00%
	2040	198.60%	168.08%	26.28%	100.97%	3.25%	100.24%	36.58%	0.00%	0.00%
	2050	221.52%	186.17%	25.98%	101.33%	3.23%	100.33%	39.48%	0.00%	0.00%
	2075	288.51%	237.01%	25.82%	101.64%	3.21%	100.41%	49.50%	0.00%	0.00%
	2100	375.54%	302.63%	25.56%	101.77%	3.20%	100.44%	64.15%	0.00%	0.00%
Scenario 5	2005	100.01%	100.01%	28.03%	100.00%	3.31%	100.00%	33.64%	0.00%	0.00%
	2010	113.87%	106.40%	28.05%	100.88%	3.25%	100.22%	33.64%	0.00%	0.00%
	2015	128.57%	114.80%	27.87%	101.39%	3.22%	100.35%	33.64%	0.00%	0.00%
	2020	143.75%	124.82%	27.49%	101.69%	3.20%	100.42%	33.73%	0.00%	0.00%
	2030	172.80%	146.82%	26.84%	101.68%	3.20%	100.42%	34.67%	0.00%	0.00%
	2040	198.60%	168.08%	26.28%	100.97%	3.25%	100.24%	36.58%	0.00%	0.00%
	2050	221.52%	186.17%	25.98%	101.33%	3.23%	100.33%	39.49%	0.00%	0.00%
	2075	288.51%	237.01%	25.82%	101.65%	3.21%	100.41%	49.50%	0.00%	0.00%
	2100	375.61%	302.59%	25.56%	101.78%	3.20%	100.44%	64.15%	0.00%	0.00%
Scenario 6	2005	100.00%	100.00%	28.06%	100.00%	3.31%	100.00%	34.05%	0.00%	0.00%
	2010	113.86%	106.39%	28.08%	100.84%	3.26%	100.21%	34.05%	0.00%	0.00%
	2015	128.56%	114.79%	27.88%	101.30%	3.23%	100.32%	34.03%	0.00%	0.00%
	2020	143.75%	124.81%	27.48%	101.68%	3.21%	100.42%	34.10%	0.00%	0.00%
	2030	172.79%	146.82%	26.81%	101.73%	3.21%	100.43%	35.01%	0.00%	0.00%
	2040	198.58%	168.06%	26.25%	101.04%	3.25%	100.26%	36.91%	0.00%	0.00%
	2050	221.49%	186.13%	25.96%	101.41%	3.23%	100.35%	39.84%	0.00%	0.00%
	2075	288.50%	236.93%	25.80%	101.75%	3.21%	100.43%	50.00%	0.00%	0.00%
	2100	375.68%	302.46%	25.54%	101.90%	3.20%	100.47%	64.84%	0.00%	0.00%

Table 8 Simulation Results – INDONESIA (continued)

		GNP	GNP per employee	Net national saving-GNP ratio	Capital-labor ratio	Interest rate	Wage rate	Debt-GDP ratio	Pension premium to wage	Pension burden-GDP ratio
Scenario 7	2005	100.00%	100.00%	28.08%	100.00%	3.32%	100.00%	34.07%	0.00%	0.00%
	2010	113.86%	106.39%	28.11%	100.81%	3.27%	100.20%	34.07%	0.00%	0.00%
	2015	128.56%	114.79%	27.90%	101.25%	3.24%	100.31%	34.05%	0.00%	0.00%
	2020	143.75%	124.81%	27.47%	101.67%	3.21%	100.42%	34.09%	0.00%	0.00%
	2030	172.79%	146.82%	26.80%	101.76%	3.21%	100.44%	34.97%	0.00%	0.00%
	2040	198.58%	168.06%	26.24%	101.08%	3.25%	100.27%	36.84%	0.00%	0.00%
	2050	221.48%	186.13%	25.96%	101.46%	3.23%	100.36%	39.75%	0.00%	0.00%
	2075	288.49%	236.92%	25.80%	101.80%	3.21%	100.45%	49.85%	0.00%	0.00%
	2100	375.68%	302.46%	25.54%	101.95%	3.20%	100.48%	64.62%	0.00%	0.00%
Scenario 8	2005	100.01%	100.01%	28.09%	100.00%	3.32%	100.00%	33.71%	0.00%	0.00%
	2010	113.87%	106.40%	28.11%	100.81%	3.27%	100.20%	33.71%	0.00%	0.00%
	2015	128.57%	114.80%	27.90%	101.25%	3.24%	100.31%	33.68%	0.00%	0.00%
	2020	143.76%	124.83%	27.48%	101.67%	3.21%	100.42%	33.72%	0.00%	0.00%
	2030	172.81%	146.83%	26.81%	101.76%	3.21%	100.44%	34.57%	0.00%	0.00%
	2040	198.59%	168.08%	26.25%	101.08%	3.25%	100.27%	36.40%	0.00%	0.00%
	2050	221.50%	186.16%	25.97%	101.45%	3.23%	100.36%	39.24%	0.00%	0.00%
	2075	288.45%	237.01%	25.82%	101.77%	3.21%	100.44%	49.12%	0.00%	0.00%
	2100	375.43%	302.64%	25.57%	101.89%	3.20%	100.47%	63.61%	0.00%	0.00%

Table 9 Simulation Results – BANGLADESH

		GNP	GNP per employee	Net national saving-GNP ratio	Capital-labor ratio	Interest rate	Wage rate	Debt-GDP ratio	Pension premium to wage	Pension burden-GDP ratio
Scenario 1	2005	100.00%	100.00%	8.14%	100.00%	3.31%	100.00%	37.40%	0.00%	0.00%
	2010	117.26%	105.41%	7.89%	100.88%	3.25%	100.22%	37.40%	0.00%	0.00%
	2015	136.12%	111.21%	7.71%	101.39%	3.22%	100.35%	37.43%	0.00%	0.00%
	2020	155.37%	117.35%	7.49%	101.70%	3.20%	100.42%	37.96%	0.00%	0.00%
	2030	196.17%	130.48%	7.24%	101.68%	3.20%	100.42%	40.12%	0.00%	0.00%
	2040	243.12%	144.40%	6.81%	100.97%	3.25%	100.24%	42.68%	0.00%	0.00%
	2050	297.80%	159.74%	6.56%	101.33%	3.23%	100.33%	45.57%	0.00%	0.00%
	2075	489.25%	204.16%	6.31%	101.66%	3.21%	100.41%	53.92%	0.00%	0.00%
	2100	804.78%	261.13%	6.06%	101.81%	3.20%	100.45%	63.58%	0.00%	0.00%
Scenario 2	2005	100.00%	100.00%	8.14%	100.00%	3.31%	100.00%	37.32%	0.00%	0.00%
	2010	117.27%	105.42%	7.89%	100.88%	3.25%	100.22%	37.32%	0.00%	0.00%
	2015	136.12%	111.21%	7.71%	101.39%	3.22%	100.35%	37.35%	0.00%	0.00%
	2020	155.38%	117.36%	7.49%	101.69%	3.20%	100.42%	37.89%	0.00%	0.00%
	2030	196.17%	130.48%	7.24%	101.68%	3.20%	100.42%	40.04%	0.00%	0.00%
	2040	243.12%	144.41%	6.82%	100.97%	3.25%	100.24%	42.60%	0.00%	0.00%
	2050	297.79%	159.74%	6.57%	101.32%	3.23%	100.33%	45.49%	0.00%	0.00%
	2075	489.15%	204.16%	6.32%	101.64%	3.21%	100.41%	53.86%	0.00%	0.00%
	2100	804.38%	261.14%	6.08%	101.76%	3.20%	100.44%	63.53%	0.00%	0.00%
Scenario 3	2005	100.00%	100.00%	8.14%	100.00%	3.31%	100.00%	37.32%	0.00%	0.00%
	2010	117.27%	105.42%	7.89%	100.88%	3.25%	100.22%	37.32%	0.00%	0.00%
	2015	136.12%	111.21%	7.71%	101.39%	3.22%	100.35%	37.35%	0.00%	0.00%
	2020	155.38%	117.36%	7.49%	101.69%	3.20%	100.42%	37.89%	0.00%	0.00%
	2030	196.17%	130.48%	7.24%	101.68%	3.20%	100.42%	40.04%	0.00%	0.00%
	2040	243.12%	144.41%	6.82%	100.97%	3.25%	100.24%	42.60%	0.00%	0.00%
	2050	297.80%	159.74%	6.57%	101.33%	3.23%	100.33%	45.49%	0.00%	0.00%
	2075	489.19%	204.16%	6.32%	101.65%	3.21%	100.41%	53.84%	0.00%	0.00%
	2100	804.61%	261.14%	6.07%	101.79%	3.20%	100.44%	63.49%	0.00%	0.00%

Table 9 Simulation Results – BANGLADESH (continued)

		GNP	GNP per employee	Net national saving-GNP ratio	Capital-labor ratio	Interest rate	Wage rate	Debt-GDP ratio	Pension premium to wage	Pension burden-GDP ratio
Scenario 4	2005	100.00%	100.00%	8.14%	100.00%	3.31%	100.00%	37.32%	0.00%	0.00%
	2010	117.27%	105.42%	7.89%	100.88%	3.25%	100.22%	37.32%	0.00%	0.00%
	2015	136.12%	111.21%	7.71%	101.39%	3.22%	100.35%	37.35%	0.00%	0.00%
	2020	155.38%	117.36%	7.49%	101.70%	3.20%	100.42%	37.89%	0.00%	0.00%
	2030	196.17%	130.48%	7.24%	101.68%	3.20%	100.42%	40.04%	0.00%	0.00%
	2040	243.12%	144.41%	6.81%	100.97%	3.25%	100.24%	42.60%	0.00%	0.00%
	2050	297.80%	159.74%	6.57%	101.33%	3.23%	100.33%	45.49%	0.00%	0.00%
	2075	489.20%	204.16%	6.32%	101.64%	3.21%	100.41%	53.85%	0.00%	0.00%
	2100	804.52%	261.14%	6.08%	101.77%	3.20%	100.44%	63.52%	0.00%	0.00%
Scenario 5	2005	100.00%	100.00%	8.14%	100.00%	3.31%	100.00%	37.32%	0.00%	0.00%
	2010	117.27%	105.42%	7.89%	100.88%	3.25%	100.22%	37.32%	0.00%	0.00%
	2015	136.12%	111.21%	7.71%	101.39%	3.22%	100.35%	37.35%	0.00%	0.00%
	2020	155.38%	117.36%	7.49%	101.69%	3.20%	100.42%	37.89%	0.00%	0.00%
	2030	196.17%	130.48%	7.24%	101.68%	3.20%	100.42%	40.04%	0.00%	0.00%
	2040	243.12%	144.41%	6.81%	100.97%	3.25%	100.24%	42.60%	0.00%	0.00%
	2050	297.80%	159.74%	6.57%	101.33%	3.23%	100.33%	45.49%	0.00%	0.00%
	2075	489.20%	204.16%	6.32%	101.65%	3.21%	100.41%	53.84%	0.00%	0.00%
	2100	804.59%	261.14%	6.07%	101.78%	3.20%	100.44%	63.50%	0.00%	0.00%
Scenario 6	2005	100.00%	100.00%	8.19%	100.00%	3.31%	100.00%	37.47%	0.00%	0.00%
	2010	117.25%	105.41%	7.93%	100.84%	3.26%	100.21%	37.48%	0.00%	0.00%
	2015	136.10%	111.19%	7.72%	101.30%	3.23%	100.32%	37.49%	0.00%	0.00%
	2020	155.37%	117.35%	7.47%	101.68%	3.21%	100.42%	38.00%	0.00%	0.00%
	2030	196.17%	130.48%	7.22%	101.73%	3.21%	100.43%	40.11%	0.00%	0.00%
	2040	243.12%	144.40%	6.80%	101.04%	3.25%	100.26%	42.64%	0.00%	0.00%
	2050	297.80%	159.74%	6.56%	101.41%	3.23%	100.35%	45.51%	0.00%	0.00%
	2075	489.24%	204.15%	6.31%	101.75%	3.21%	100.43%	53.85%	0.00%	0.00%
	2100	804.77%	261.13%	6.06%	101.90%	3.20%	100.47%	63.49%	0.00%	0.00%

Table 9 Simulation Results – BANGLADESH (continued)

		GNP	GNP per employee	Net national saving-GNP ratio	Capital-labor ratio	Interest rate	Wage rate	Debt-GDP ratio	Pension premium to wage	Pension burden-GDP ratio
Scenario 7	2005	100.00%	100.00%	8.22%	100.00%	3.32%	100.00%	37.52%	0.00%	0.00%
	2010	117.25%	105.40%	7.96%	100.81%	3.27%	100.20%	37.52%	0.00%	0.00%
	2015	136.08%	111.18%	7.73%	101.25%	3.24%	100.31%	37.53%	0.00%	0.00%
	2020	155.36%	117.35%	7.47%	101.67%	3.21%	100.42%	38.02%	0.00%	0.00%
	2030	196.17%	130.49%	7.21%	101.76%	3.21%	100.44%	40.10%	0.00%	0.00%
	2040	243.12%	144.40%	6.79%	101.08%	3.25%	100.27%	42.62%	0.00%	0.00%
	2050	297.80%	159.74%	6.55%	101.46%	3.23%	100.36%	45.48%	0.00%	0.00%
	2075	489.24%	204.15%	6.31%	101.80%	3.21%	100.45%	53.80%	0.00%	0.00%
	2100	804.77%	261.13%	6.06%	101.95%	3.20%	100.48%	63.44%	0.00%	0.00%
Scenario 8	2005	100.00%	100.00%	8.23%	100.00%	3.32%	100.00%	37.44%	0.00%	0.00%
	2010	117.25%	105.40%	7.96%	100.81%	3.27%	100.20%	37.45%	0.00%	0.00%
	2015	136.09%	111.18%	7.73%	101.25%	3.24%	100.31%	37.46%	0.00%	0.00%
	2020	155.37%	117.35%	7.47%	101.67%	3.21%	100.42%	37.95%	0.00%	0.00%
	2030	196.18%	130.49%	7.22%	101.76%	3.21%	100.44%	40.03%	0.00%	0.00%
	2040	243.12%	144.41%	6.80%	101.08%	3.25%	100.27%	42.54%	0.00%	0.00%
	2050	297.79%	159.74%	6.56%	101.45%	3.23%	100.36%	45.40%	0.00%	0.00%
	2075	489.14%	204.16%	6.33%	101.77%	3.21%	100.44%	53.74%	0.00%	0.00%
	2100	804.37%	261.14%	6.08%	101.89%	3.20%	100.47%	63.40%	0.00%	0.00%

Table 10 Simulation Results – PHILIPPINES

		GNP	GNP per employee	Net national saving-GNP ratio	Capital-labor ratio	Interest rate	Wage rate	Debt-GDP ratio	Pension premium to wage	Pension burden-GDP ratio
Scenario 1	2005	100.00%	100.00%	23.01%	100.00%	3.31%	100.00%	55.80%	0.00%	0.00%
	2010	118.06%	106.35%	22.73%	100.88%	3.25%	100.22%	55.80%	0.00%	0.00%
	2015	138.25%	113.42%	22.54%	101.39%	3.22%	100.35%	55.83%	0.00%	0.00%
	2020	159.94%	120.95%	22.29%	101.70%	3.20%	100.42%	56.37%	0.00%	0.00%
	2030	207.59%	136.63%	22.08%	101.68%	3.20%	100.42%	59.11%	0.00%	0.00%
	2040	263.30%	153.39%	21.72%	100.97%	3.25%	100.24%	62.97%	0.00%	0.00%
	2050	330.40%	169.76%	21.47%	101.33%	3.23%	100.33%	67.28%	0.00%	0.00%
	2075	569.61%	216.28%	21.12%	101.66%	3.21%	100.41%	80.08%	0.00%	0.00%
	2100	986.58%	277.39%	20.77%	101.81%	3.20%	100.45%	93.68%	0.00%	0.00%
Scenario 2	2005	100.00%	100.00%	23.01%	100.00%	3.31%	100.00%	55.78%	0.00%	0.00%
	2010	118.06%	106.35%	22.73%	100.88%	3.25%	100.22%	55.78%	0.00%	0.00%
	2015	138.25%	113.42%	22.54%	101.39%	3.22%	100.35%	55.80%	0.00%	0.00%
	2020	159.94%	120.95%	22.29%	101.69%	3.20%	100.42%	56.35%	0.00%	0.00%
	2030	207.55%	136.64%	22.09%	101.68%	3.20%	100.42%	59.10%	0.00%	0.00%
	2040	263.11%	153.44%	21.72%	100.97%	3.25%	100.24%	62.99%	0.00%	0.00%
	2050	329.79%	169.87%	21.46%	101.32%	3.23%	100.33%	67.37%	0.00%	0.00%
	2075	564.10%	216.82%	21.06%	101.64%	3.21%	100.41%	80.71%	0.00%	0.00%
	2100	961.54%	278.57%	20.64%	101.76%	3.20%	100.44%	95.63%	0.00%	0.00%
Scenario 3	2005	100.00%	100.00%	23.01%	100.00%	3.31%	100.00%	55.78%	0.00%	0.00%
	2010	118.06%	106.35%	22.73%	100.88%	3.25%	100.22%	55.78%	0.00%	0.00%
	2015	138.25%	113.42%	22.54%	101.39%	3.22%	100.35%	55.80%	0.00%	0.00%
	2020	159.94%	120.95%	22.29%	101.69%	3.20%	100.42%	56.35%	0.00%	0.00%
	2030	207.55%	136.64%	22.08%	101.68%	3.20%	100.42%	59.10%	0.00%	0.00%
	2040	263.13%	153.43%	21.72%	100.97%	3.25%	100.24%	62.99%	0.00%	0.00%
	2050	329.91%	169.85%	21.46%	101.33%	3.23%	100.33%	67.34%	0.00%	0.00%
	2075	566.04%	216.58%	21.08%	101.65%	3.21%	100.41%	80.46%	0.00%	0.00%
	2100	973.86%	277.77%	20.72%	101.79%	3.20%	100.44%	94.61%	0.00%	0.00%

Table 10 Simulation Results – PHILIPPINES (continued)

		GNP	GNP per employee	Net national saving-GNP ratio	Capital-labor ratio	Interest rate	Wage rate	Debt-GDP ratio	Pension premium to wage	Pension burden-GDP ratio
Scenario 4	2005	100.00%	100.00%	23.01%	100.00%	3.31%	100.00%	55.78	0.00%	0.00%
	2010	118.06%	106.35%	22.73%	100.88%	3.25%	100.22%	55.78	0.00%	0.00%
	2015	138.25%	113.42%	22.54%	101.39%	3.22%	100.35%	55.80	0.00%	0.00%
	2020	159.94%	120.95%	22.29%	101.70%	3.20%	100.42%	56.35	0.00%	0.00%
	2030	207.59%	136.63%	22.09%	101.68%	3.20%	100.42%	59.09	0.00%	0.00%
	2040	263.25%	153.41%	21.72%	100.97%	3.25%	100.24%	62.97	0.00%	0.00%
	2050	330.20%	169.80%	21.47%	101.33%	3.23%	100.33%	67.29	0.00%	0.00%
	2075	566.76%	216.60%	21.08%	101.64%	3.21%	100.41%	80.41	0.00%	0.00%
	2100	970.61%	278.32%	20.68%	101.77%	3.20%	100.44%	94.94	0.00%	0.00%
Scenario 5	2005	100.00%	100.00%	23.01%	100.00%	3.31%	100.00%	55.78	0.00%	0.00%
	2010	118.06%	106.35%	22.73%	100.88%	3.25%	100.22%	55.78	0.00%	0.00%
	2015	138.25%	113.42%	22.54%	101.39%	3.22%	100.35%	55.80	0.00%	0.00%
	2020	159.94%	120.95%	22.29%	101.69%	3.20%	100.42%	56.35	0.00%	0.00%
	2030	207.57%	136.64%	22.09%	101.68%	3.20%	100.42%	59.09	0.00%	0.00%
	2040	263.21%	153.42%	21.72%	100.97%	3.25%	100.24%	62.97	0.00%	0.00%
	2050	330.10%	169.82%	21.47%	101.33%	3.23%	100.33%	67.31	0.00%	0.00%
	2075	566.85%	216.55%	21.09%	101.65%	3.21%	100.41%	80.38	0.00%	0.00%
	2100	974.00%	277.98%	20.71%	101.78%	3.20%	100.44%	94.63	0.00%	0.00%
Scenario 6	2005	100.00%	100.00%	23.05%	100.00%	3.31%	100.00%	55.85	0.00%	0.00%
	2010	118.06%	106.35%	22.77%	100.84%	3.26%	100.21%	55.86	0.00%	0.00%
	2015	138.24%	113.42%	22.56%	101.30%	3.23%	100.32%	55.89	0.00%	0.00%
	2020	159.94%	120.95%	22.28%	101.68%	3.21%	100.42%	56.41	0.00%	0.00%
	2030	207.59%	136.63%	22.07%	101.73%	3.21%	100.43%	59.11	0.00%	0.00%
	2040	263.29%	153.39%	21.70%	101.04%	3.25%	100.26%	62.96	0.00%	0.00%
	2050	330.38%	169.75%	21.46%	101.41%	3.23%	100.35%	67.24	0.00%	0.00%
	2075	569.55%	216.26%	21.12%	101.75%	3.21%	100.43%	80.04	0.00%	0.00%
	2100	986.49%	277.37%	20.77%	101.90%	3.20%	100.47%	93.63	0.00%	0.00%

Table 10 Simulation Results – PHILIPPINES (continued)

		GNP	GNP per employee	Net national saving-GNP ratio	Capital-labor ratio	Interest rate	Wage rate	Debt-GDP ratio	Pension premium to wage	Pension burden-GDP ratio
Scenario 7	2005	100.00%	100.00%	23.08%	100.00%	3.32%	100.00%	55.89%	0.00%	0.00%
	2010	118.06%	106.35%	22.80%	100.81%	3.27%	100.20%	55.90%	0.00%	0.00%
	2015	138.24%	113.41%	22.57%	101.25%	3.24%	100.31%	55.92%	0.00%	0.00%
	2020	159.94%	120.95%	22.28%	101.67%	3.21%	100.42%	56.43%	0.00%	0.00%
	2030	207.59%	136.63%	22.06%	101.76%	3.21%	100.44%	59.11%	0.00%	0.00%
	2040	263.28%	153.38%	21.69%	101.08%	3.25%	100.27%	62.95%	0.00%	0.00%
	2050	330.37%	169.74%	21.46%	101.46%	3.23%	100.36%	67.23%	0.00%	0.00%
	2075	569.52%	216.24%	21.12%	101.80%	3.21%	100.45%	80.01%	0.00%	0.00%
	2100	986.43%	277.35%	20.77%	101.95%	3.20%	100.48%	93.60%	0.00%	0.00%
Scenario 8	2005	100.00%	100.00%	23.08%	100.00%	3.32%	100.00%	55.86%	0.00%	0.00%
	2010	118.06%	106.35%	22.80%	100.81%	3.27%	100.20%	55.88%	0.00%	0.00%
	2015	138.24%	113.41%	22.57%	101.25%	3.24%	100.31%	55.90%	0.00%	0.00%
	2020	159.94%	120.95%	22.28%	101.67%	3.21%	100.42%	56.41%	0.00%	0.00%
	2030	207.55%	136.64%	22.06%	101.76%	3.21%	100.44%	59.11%	0.00%	0.00%
	2040	263.10%	153.43%	21.69%	101.08%	3.25%	100.27%	62.97%	0.00%	0.00%
	2050	329.75%	169.85%	21.45%	101.45%	3.23%	100.36%	67.32%	0.00%	0.00%
	2075	564.01%	216.79%	21.06%	101.77%	3.21%	100.44%	80.64%	0.00%	0.00%
	2100	961.39%	278.53%	20.64%	101.89%	3.20%	100.47%	95.56%	0.00%	0.00%

Table 11 Simulation Results – THAILAND

		GNP	GNP per employee	Net national saving-GNP ratio	Capital-labor ratio	Interest rate	Wage rate	Debt-GDP ratio	Pension premium to wage	Pension burden-GDP ratio
Scenario 1	2005	100.00%	100.00%	27.91%	100.00%	3.31%	100.00%	37.90%	0.00%	0.00%
	2010	111.78%	109.07%	27.45%	100.88%	3.25%	100.22%	37.90%	0.00%	0.00%
	2015	123.18%	120.78%	26.83%	101.39%	3.22%	100.35%	37.91%	0.00%	0.00%
	2020	133.44%	134.25%	26.08%	101.70%	3.20%	100.42%	38.18%	0.00%	0.00%
	2030	148.07%	160.49%	25.05%	101.68%	3.20%	100.42%	40.40%	0.00%	0.00%
	2040	154.90%	179.05%	24.71%	100.97%	3.25%	100.24%	45.44%	0.00%	0.00%
	2050	158.85%	195.63%	24.64%	101.33%	3.23%	100.33%	52.75%	0.00%	0.00%
	2075	174.71%	250.29%	24.08%	101.66%	3.21%	100.41%	77.64%	0.00%	0.00%
	2100	189.49%	315.44%	23.43%	101.81%	3.20%	100.45%	121.31%	0.00%	0.00%
Scenario 2	2005	100.00%	100.00%	27.91%	100.00%	3.31%	100.00%	37.81%	0.00%	0.00%
	2010	111.78%	109.07%	27.45%	100.88%	3.25%	100.22%	37.81%	0.00%	0.00%
	2015	123.18%	120.79%	26.83%	101.39%	3.22%	100.35%	37.81%	0.00%	0.00%
	2020	133.45%	134.26%	26.08%	101.69%	3.20%	100.42%	38.08%	0.00%	0.00%
	2030	148.07%	160.50%	25.05%	101.68%	3.20%	100.42%	40.29%	0.00%	0.00%
	2040	154.88%	179.08%	24.71%	100.97%	3.25%	100.24%	45.31%	0.00%	0.00%
	2050	158.77%	195.72%	24.64%	101.32%	3.23%	100.33%	52.60%	0.00%	0.00%
	2075	174.19%	250.70%	24.07%	101.64%	3.21%	100.41%	77.56%	0.00%	0.00%
	2100	187.76%	316.42%	23.38%	101.76%	3.20%	100.44%	121.86%	0.00%	0.00%
Scenario 3	2005	100.00%	100.00%	27.91%	100.00%	3.31%	100.00%	37.81%	0.00%	0.00%
	2010	111.78%	109.07%	27.45%	100.88%	3.25%	100.22%	37.81%	0.00%	0.00%
	2015	123.18%	120.79%	26.83%	101.39%	3.22%	100.35%	37.81%	0.00%	0.00%
	2020	133.45%	134.26%	26.08%	101.69%	3.20%	100.42%	38.08%	0.00%	0.00%
	2030	148.06%	160.50%	25.05%	101.68%	3.20%	100.42%	40.29%	0.00%	0.00%
	2040	154.88%	179.08%	24.71%	100.97%	3.25%	100.24%	45.30%	0.00%	0.00%
	2050	158.79%	195.70%	24.64%	101.33%	3.23%	100.33%	52.60%	0.00%	0.00%
	2075	174.42%	250.49%	24.08%	101.65%	3.21%	100.41%	77.46%	0.00%	0.00%
	2100	188.81%	315.69%	23.42%	101.79%	3.20%	100.44%	121.21%	0.00%	0.00%

Table 11 Simulation Results – THAILAND (continued)

		GNP	GNP per employee	Net national saving-GNP ratio	Capital-labor ratio	Interest rate	Wage rate	Debt-GDP ratio	Pension premium to wage	Pension burden-GDP ratio
Scenario 4	2005	100.00%	100.00%	27.91%	100.00%	3.31%	100.00%	37.81%	0.00%	0.00%
	2010	111.78%	109.07%	27.45%	100.88%	3.25%	100.22%	37.81%	0.00%	0.00%
	2015	123.18%	120.79%	26.83%	101.39%	3.22%	100.35%	37.81%	0.00%	0.00%
	2020	133.45%	134.26%	26.08%	101.70%	3.20%	100.42%	38.08%	0.00%	0.00%
	2030	148.07%	160.49%	25.05%	101.68%	3.20%	100.42%	40.28%	0.00%	0.00%
	2040	154.90%	179.06%	24.71%	100.97%	3.25%	100.24%	45.30%	0.00%	0.00%
	2050	158.82%	195.67%	24.64%	101.33%	3.23%	100.33%	52.58%	0.00%	0.00%
	2075	174.41%	250.58%	24.08%	101.64%	3.21%	100.41%	77.47%	0.00%	0.00%
	2100	188.25%	316.28%	23.40%	101.77%	3.20%	100.44%	121.55%	0.00%	0.00%
Scenario 5	2005	100.00%	100.00%	27.91%	100.00%	3.31%	100.00%	37.81%	0.00%	0.00%
	2010	111.78%	109.07%	27.45%	100.88%	3.25%	100.22%	37.81%	0.00%	0.00%
	2015	123.18%	120.79%	26.83%	101.39%	3.22%	100.35%	37.81%	0.00%	0.00%
	2020	133.45%	134.26%	26.08%	101.69%	3.20%	100.42%	38.08%	0.00%	0.00%
	2030	148.07%	160.50%	25.05%	101.68%	3.20%	100.42%	40.28%	0.00%	0.00%
	2040	154.89%	179.07%	24.71%	100.97%	3.25%	100.24%	45.30%	0.00%	0.00%
	2050	158.81%	195.68%	24.64%	101.33%	3.23%	100.33%	52.59%	0.00%	0.00%
	2075	174.46%	250.51%	24.08%	101.65%	3.21%	100.41%	77.45%	0.00%	0.00%
	2100	188.63%	315.95%	23.41%	101.78%	3.20%	100.44%	121.32%	0.00%	0.00%
Scenario 6	2005	100.00%	100.00%	27.94%	100.00%	3.31%	100.00%	37.94%	0.00%	0.00%
	2010	111.78%	109.07%	27.48%	100.84%	3.26%	100.21%	37.94%	0.00%	0.00%
	2015	123.18%	120.78%	26.85%	101.30%	3.23%	100.32%	37.93%	0.00%	0.00%
	2020	133.45%	134.26%	26.07%	101.68%	3.21%	100.42%	38.18%	0.00%	0.00%
	2030	148.07%	160.49%	25.02%	101.73%	3.21%	100.43%	40.34%	0.00%	0.00%
	2040	154.90%	179.04%	24.69%	101.04%	3.25%	100.26%	45.34%	0.00%	0.00%
	2050	158.84%	195.62%	24.63%	101.41%	3.23%	100.35%	52.60%	0.00%	0.00%
	2075	174.70%	250.28%	24.09%	101.75%	3.21%	100.43%	77.37%	0.00%	0.00%
	2100	189.49%	315.44%	23.44%	101.90%	3.20%	100.47%	120.84%	0.00%	0.00%

Table 11 Simulation Results – THAILAND (continued)

		GNP	GNP per employee	Net national saving-GNP ratio	Capital-labor ratio	Interest rate	Wage rate	Debt-GDP ratio	Pension premium to wage	Pension burden-GDP ratio
Scenario 7	2005	100.00%	100.00%	27.97%	100.00%	3.32%	100.00%	37.96%	0.00%	0.00%
	2010	111.78%	109.07%	27.51%	100.81%	3.27%	100.20%	37.96%	0.00%	0.00%
	2015	123.18%	120.79%	26.85%	101.25%	3.24%	100.31%	37.95%	0.00%	0.00%
	2020	133.46%	134.27%	26.06%	101.67%	3.21%	100.42%	38.18%	0.00%	0.00%
	2030	148.07%	160.49%	25.00%	101.76%	3.21%	100.44%	40.31%	0.00%	0.00%
	2040	154.90%	179.04%	24.68%	101.08%	3.25%	100.27%	45.27%	0.00%	0.00%
	2050	158.84%	195.61%	24.62%	101.46%	3.23%	100.36%	52.51%	0.00%	0.00%
	2075	174.69%	250.27%	24.09%	101.80%	3.21%	100.45%	77.20%	0.00%	0.00%
	2100	189.49%	315.44%	23.45%	101.95%	3.20%	100.48%	120.55%	0.00%	0.00%
Scenario 8	2005	100.00%	100.00%	27.97%	100.00%	3.32%	100.00%	37.87%	0.00%	0.00%
	2010	111.79%	109.07%	27.51%	100.81%	3.27%	100.20%	37.87%	0.00%	0.00%
	2015	123.18%	120.79%	26.86%	101.25%	3.24%	100.31%	37.85%	0.00%	0.00%
	2020	133.46%	134.27%	26.06%	101.67%	3.21%	100.42%	38.08%	0.00%	0.00%
	2030	148.07%	160.51%	25.00%	101.76%	3.21%	100.44%	40.20%	0.00%	0.00%
	2040	154.87%	179.07%	24.68%	101.08%	3.25%	100.27%	45.14%	0.00%	0.00%
	2050	158.76%	195.70%	24.62%	101.45%	3.23%	100.36%	52.36%	0.00%	0.00%
	2075	174.18%	250.68%	24.07%	101.77%	3.21%	100.44%	77.12%	0.00%	0.00%
	2100	187.76%	316.42%	23.40%	101.89%	3.20%	100.47%	121.10%	0.00%	0.00%

Table 12 Simulation Results – VIETNAM

		GNP	GNP per employee	Net national saving-GNP ratio	Capital-labor ratio	Interest rate	Wage rate	Debt-GDP ratio	Pension premium to wage	Pension burden-GDP ratio
Scenario 1	2005	100.00%	100.00%	29.25%	100.00%	3.31%	100.00%	42.00%	0.00%	0.00%
	2010	117.61%	106.22%	29.31%	100.88%	3.25%	100.22%	42.00%	0.00%	0.00%
	2015	137.37%	114.92%	29.07%	101.39%	3.22%	100.35%	42.04%	0.00%	0.00%
	2020	156.65%	125.92%	28.44%	101.70%	3.20%	100.42%	42.76%	0.00%	0.00%
	2030	192.80%	149.28%	27.49%	101.68%	3.20%	100.42%	45.50%	0.00%	0.00%
	2040	227.67%	171.91%	26.81%	100.97%	3.25%	100.24%	49.24%	0.00%	0.00%
	2050	260.53%	198.30%	26.03%	101.33%	3.23%	100.33%	54.12%	0.00%	0.00%
	2075	332.84%	247.74%	25.73%	101.66%	3.21%	100.41%	74.95%	0.00%	0.00%
	2100	428.27%	316.07%	25.03%	101.81%	3.20%	100.45%	104.74%	0.00%	0.00%
Scenario 2	2005	100.01%	100.01%	29.26%	100.00%	3.31%	100.00%	41.75%	0.00%	0.00%
	2010	117.61%	106.23%	29.31%	100.88%	3.25%	100.22%	41.76%	0.00%	0.00%
	2015	137.38%	114.92%	29.08%	101.39%	3.22%	100.35%	41.81%	0.00%	0.00%
	2020	156.66%	125.92%	28.44%	101.69%	3.20%	100.42%	42.52%	0.00%	0.00%
	2030	192.81%	149.29%	27.49%	101.68%	3.20%	100.42%	45.25%	0.00%	0.00%
	2040	227.66%	171.94%	26.82%	100.97%	3.25%	100.24%	48.99%	0.00%	0.00%
	2050	260.44%	198.37%	26.03%	101.32%	3.23%	100.33%	53.84%	0.00%	0.00%
	2075	332.12%	248.04%	25.72%	101.64%	3.21%	100.41%	74.65%	0.00%	0.00%
	2100	425.49%	316.78%	25.01%	101.76%	3.20%	100.44%	104.68%	0.00%	0.00%
Scenario 3	2005	100.01%	100.01%	29.26%	100.00%	3.31%	100.00%	41.75%	0.00%	0.00%
	2010	117.61%	106.23%	29.31%	100.88%	3.25%	100.22%	41.76%	0.00%	0.00%
	2015	137.38%	114.92%	29.08%	101.39%	3.22%	100.35%	41.81%	0.00%	0.00%
	2020	156.66%	125.92%	28.44%	101.69%	3.20%	100.42%	42.52%	0.00%	0.00%
	2030	192.81%	149.29%	27.49%	101.68%	3.20%	100.42%	45.26%	0.00%	0.00%
	2040	227.66%	171.93%	26.82%	100.97%	3.25%	100.24%	48.98%	0.00%	0.00%
	2050	260.46%	198.36%	26.03%	101.33%	3.23%	100.33%	53.84%	0.00%	0.00%
	2075	332.42%	247.91%	25.73%	101.65%	3.21%	100.41%	74.58%	0.00%	0.00%
	2100	427.06%	316.30%	25.03%	101.79%	3.20%	100.44%	104.34%	0.00%	0.00%

Table 12 Simulation Results – VIETNAM (continued)

		GNP	GNP per employee	Net national saving-GNP ratio	Capital-labor ratio	Interest rate	Wage rate	Debt-GDP ratio	Pension premium to wage	Pension burden-GDP ratio
Scenario 4	2005	100.01%	100.01%	29.26%	100.00%	3.31%	100.00%	41.75%	0.00%	0.00%
	2010	117.61%	106.23%	29.31%	100.88%	3.25%	100.22%	41.76%	0.00%	0.00%
	2015	137.38%	114.92%	29.08%	101.39%	3.22%	100.35%	41.81%	0.00%	0.00%
	2020	156.66%	125.92%	28.44%	101.70%	3.20%	100.42%	42.52%	0.00%	0.00%
	2030	192.82%	149.29%	27.49%	101.68%	3.20%	100.42%	45.25%	0.00%	0.00%
	2040	227.68%	171.92%	26.82%	100.97%	3.25%	100.24%	48.98%	0.00%	0.00%
	2050	260.51%	198.34%	26.03%	101.33%	3.23%	100.33%	53.83%	0.00%	0.00%
	2075	332.46%	247.95%	25.73%	101.64%	3.21%	100.41%	74.59%	0.00%	0.00%
	2100	426.38%	316.66%	25.02%	101.77%	3.20%	100.44%	104.50%	0.00%	0.00%
Scenario 5	2005	100.01%	100.01%	29.25%	100.00%	3.31%	100.00%	41.75%	0.00%	0.00%
	2010	117.61%	106.23%	29.31%	100.88%	3.25%	100.22%	41.76%	0.00%	0.00%
	2015	137.38%	114.92%	29.08%	101.39%	3.22%	100.35%	41.81%	0.00%	0.00%
	2020	156.66%	125.92%	28.44%	101.69%	3.20%	100.42%	42.52%	0.00%	0.00%
	2030	192.81%	149.29%	27.49%	101.68%	3.20%	100.42%	45.25%	0.00%	0.00%
	2040	227.67%	171.93%	26.82%	100.97%	3.25%	100.24%	48.98%	0.00%	0.00%
	2050	260.50%	198.34%	26.03%	101.33%	3.23%	100.33%	53.83%	0.00%	0.00%
	2075	332.50%	247.91%	25.73%	101.65%	3.21%	100.41%	74.58%	0.00%	0.00%
	2100	426.91%	316.45%	25.03%	101.78%	3.20%	100.44%	104.39%	0.00%	0.00%
Scenario 6	2005	100.00%	100.00%	29.29%	100.00%	3.31%	100.00%	42.06%	0.00%	0.00%
	2010	117.61%	106.22%	29.35%	100.84%	3.26%	100.21%	42.06%	0.00%	0.00%
	2015	137.37%	114.92%	29.10%	101.30%	3.23%	100.32%	42.09%	0.00%	0.00%
	2020	156.66%	125.92%	28.44%	101.68%	3.21%	100.42%	42.77%	0.00%	0.00%
	2030	192.81%	149.28%	27.47%	101.73%	3.21%	100.43%	45.46%	0.00%	0.00%
	2040	227.67%	171.90%	26.79%	101.04%	3.25%	100.26%	49.16%	0.00%	0.00%
	2050	260.51%	198.29%	26.02%	101.41%	3.23%	100.35%	54.00%	0.00%	0.00%
	2075	332.82%	247.72%	25.73%	101.75%	3.21%	100.43%	74.75%	0.00%	0.00%
	2100	428.25%	316.05%	25.03%	101.90%	3.20%	100.47%	104.45%	0.00%	0.00%

Table 12 Simulation Results – VIETNAM (continued)

		GNP	GNP per employee	Net national saving-GNP ratio	Capital-labor ratio	Interest rate	Wage rate	Debt-GDP ratio	Pension premium to wage	Pension burden-GDP ratio
Scenario 7	2005	100.00%	100.00%	29.32%	100.00%	3.32%	100.00%	42.09%	0.00%	0.00%
	2010	117.61%	106.22%	29.38%	100.81%	3.27%	100.20%	42.10%	0.00%	0.00%
	2015	137.37%	114.92%	29.11%	101.25%	3.24%	100.31%	42.12%	0.00%	0.00%
	2020	156.66%	125.93%	28.44%	101.67%	3.21%	100.42%	42.78%	0.00%	0.00%
	2030	192.81%	149.29%	27.46%	101.76%	3.21%	100.44%	45.44%	0.00%	0.00%
	2040	227.67%	171.90%	26.78%	101.08%	3.25%	100.27%	49.11%	0.00%	0.00%
	2050	260.50%	198.28%	26.01%	101.46%	3.23%	100.36%	53.93%	0.00%	0.00%
	2075	332.80%	247.71%	25.73%	101.80%	3.21%	100.45%	74.62%	0.00%	0.00%
	2100	428.23%	316.04%	25.04%	101.95%	3.20%	100.48%	104.27%	0.00%	0.00%
Scenario 8	2005	100.01%	100.01%	29.33%	100.00%	3.32%	100.00%	41.84%	0.00%	0.00%
	2010	117.61%	106.23%	29.38%	100.81%	3.27%	100.20%	41.86%	0.00%	0.00%
	2015	137.38%	114.92%	29.12%	101.25%	3.24%	100.31%	41.89%	0.00%	0.00%
	2020	156.67%	125.93%	28.44%	101.67%	3.21%	100.42%	42.55%	0.00%	0.00%
	2030	192.82%	149.30%	27.46%	101.76%	3.21%	100.44%	45.20%	0.00%	0.00%
	2040	227.65%	171.93%	26.79%	101.08%	3.25%	100.27%	48.85%	0.00%	0.00%
	2050	260.42%	198.36%	26.02%	101.45%	3.23%	100.36%	53.65%	0.00%	0.00%
	2075	332.09%	248.02%	25.73%	101.77%	3.21%	100.44%	74.33%	0.00%	0.00%
	2100	425.46%	316.75%	25.02%	101.89%	3.20%	100.47%	104.21%	0.00%	0.00%

Table 13 Simulation Results – BRAZIL

		GNP	GNP per employee	Net national saving-GNP ratio	Capital-labor ratio	Interest rate	Wage rate	Debt-GDP ratio	Pension premium to wage	Pension burden-GDP ratio
Scenario 1	2005	100.00%	100.00%	20.68%	100.00%	3.31%	100.00%	45.10	0.00%	0.00%
	2010	114.96%	106.41%	20.34%	100.88%	3.25%	100.22%	45.10	0.00%	0.00%
	2015	129.97%	114.13%	19.91%	101.39%	3.22%	100.35%	45.10	0.00%	0.00%
	2020	145.22%	122.60%	19.50%	101.70%	3.20%	100.42%	45.10	0.00%	0.00%
	2030	175.25%	139.60%	19.09%	101.68%	3.20%	100.42%	45.53	0.00%	0.00%
	2040	204.25%	157.14%	18.74%	100.97%	3.25%	100.24%	46.84	0.00%	0.00%
	2050	232.63%	176.54%	18.27%	101.33%	3.23%	100.33%	48.41	0.00%	0.00%
	2075	315.73%	224.22%	18.14%	101.66%	3.21%	100.41%	54.71	0.00%	0.00%
	2100	428.54%	286.47%	17.98%	101.81%	3.20%	100.45%	63.75	0.00%	0.00%
Scenario 2	2005	100.00%	100.00%	20.68%	100.00%	3.31%	100.00%	45.05	0.00%	0.00%
	2010	114.96%	106.41%	20.34%	100.88%	3.25%	100.22%	45.05	0.00%	0.00%
	2015	129.97%	114.13%	19.91%	101.39%	3.22%	100.35%	45.05	0.00%	0.00%
	2020	145.22%	122.60%	19.50%	101.69%	3.20%	100.42%	45.05	0.00%	0.00%
	2030	175.20%	139.62%	19.09%	101.68%	3.20%	100.42%	45.48	0.00%	0.00%
	2040	204.08%	157.20%	18.73%	100.97%	3.25%	100.24%	46.80	0.00%	0.00%
	2050	232.14%	176.69%	18.26%	101.32%	3.23%	100.33%	48.40	0.00%	0.00%
	2075	312.67%	224.81%	18.08%	101.64%	3.21%	100.41%	54.87	0.00%	0.00%
	2100	417.97%	287.74%	17.87%	101.76%	3.20%	100.44%	64.42	0.00%	0.00%
Scenario 3	2005	100.00%	100.00%	20.68%	100.00%	3.31%	100.00%	45.05	0.00%	0.00%
	2010	114.96%	106.41%	20.34%	100.88%	3.25%	100.22%	45.05	0.00%	0.00%
	2015	129.97%	114.13%	19.91%	101.39%	3.22%	100.35%	45.05	0.00%	0.00%
	2020	145.22%	122.60%	19.50%	101.69%	3.20%	100.42%	45.05	0.00%	0.00%
	2030	175.20%	139.62%	19.09%	101.68%	3.20%	100.42%	45.48	0.00%	0.00%
	2040	204.10%	157.19%	18.73%	100.97%	3.25%	100.24%	46.80	0.00%	0.00%
	2050	232.25%	176.65%	18.26%	101.33%	3.23%	100.33%	48.38	0.00%	0.00%
	2075	313.98%	224.49%	18.11%	101.65%	3.21%	100.41%	54.74	0.00%	0.00%
	2100	424.07%	286.82%	17.95%	101.79%	3.20%	100.44%	63.92	0.00%	0.00%

Table 13 Simulation Results – BRAZIL (continued)

		GNP	GNP per employee	Net national saving-GNP ratio	Capital-labor ratio	Interest rate	Wage rate	Debt-GDP ratio	Pension premium to wage	Pension burden-GDP ratio
Scenario 4	2005	100.00%	100.00%	20.68%	100.00%	3.31%	100.00%	45.05%	0.00%	0.00%
	2010	114.96%	106.41%	20.34%	100.88%	3.25%	100.22%	45.05%	0.00%	0.00%
	2015	129.97%	114.13%	19.91%	101.39%	3.22%	100.35%	45.05%	0.00%	0.00%
	2020	145.23%	122.60%	19.50%	101.70%	3.20%	100.42%	45.05%	0.00%	0.00%
	2030	175.24%	139.61%	19.10%	101.68%	3.20%	100.42%	45.47%	0.00%	0.00%
	2040	204.21%	157.16%	18.74%	100.97%	3.25%	100.24%	46.78%	0.00%	0.00%
	2050	232.44%	176.61%	18.27%	101.33%	3.23%	100.33%	48.37%	0.00%	0.00%
	2075	313.95%	224.63%	18.10%	101.64%	3.21%	100.41%	54.77%	0.00%	0.00%
	2100	421.10%	287.51%	17.89%	101.77%	3.20%	100.44%	64.20%	0.00%	0.00%
Scenario 5	2005	100.00%	100.00%	20.68%	100.00%	3.31%	100.00%	45.05%	0.00%	0.00%
	2010	114.96%	106.41%	20.34%	100.88%	3.25%	100.22%	45.05%	0.00%	0.00%
	2015	129.97%	114.13%	19.91%	101.39%	3.22%	100.35%	45.05%	0.00%	0.00%
	2020	145.22%	122.60%	19.50%	101.69%	3.20%	100.42%	45.05%	0.00%	0.00%
	2030	175.23%	139.61%	19.10%	101.68%	3.20%	100.42%	45.48%	0.00%	0.00%
	2040	204.17%	157.17%	18.73%	100.97%	3.25%	100.24%	46.79%	0.00%	0.00%
	2050	232.39%	176.62%	18.27%	101.33%	3.23%	100.33%	48.37%	0.00%	0.00%
	2075	314.20%	224.52%	18.11%	101.65%	3.21%	100.41%	54.74%	0.00%	0.00%
	2100	423.24%	287.11%	17.93%	101.78%	3.20%	100.44%	64.01%	0.00%	0.00%
Scenario 6	2005	100.00%	100.00%	20.73%	100.00%	3.31%	100.00%	45.22%	0.00%	0.00%
	2010	114.96%	106.41%	20.39%	100.84%	3.26%	100.21%	45.22%	0.00%	0.00%
	2015	129.96%	114.13%	19.93%	101.30%	3.23%	100.32%	45.20%	0.00%	0.00%
	2020	145.23%	122.60%	19.49%	101.68%	3.21%	100.42%	45.15%	0.00%	0.00%
	2030	175.25%	139.61%	19.08%	101.73%	3.21%	100.43%	45.49%	0.00%	0.00%
	2040	204.25%	157.14%	18.72%	101.04%	3.25%	100.26%	46.73%	0.00%	0.00%
	2050	232.62%	176.53%	18.26%	101.41%	3.23%	100.35%	48.25%	0.00%	0.00%
	2075	315.71%	224.21%	18.14%	101.75%	3.21%	100.43%	54.45%	0.00%	0.00%
	2100	428.53%	286.46%	17.99%	101.90%	3.20%	100.47%	63.39%	0.00%	0.00%

Table 13 Simulation Results – BRAZIL (continued)

		GNP	GNP per employee	Net national saving-GNP ratio	Capital-labor ratio	Interest rate	Wage rate	Debt-GDP ratio	Pension premium to wage	Pension burden-GDP ratio
Scenario 7	2005	100.00%	100.00%	20.76%	100.00%	3.32%	100.00%	45.28%	0.00%	0.00%
	2010	114.96%	106.41%	20.41%	100.81%	3.27%	100.20%	45.29%	0.00%	0.00%
	2015	129.96%	114.12%	19.94%	101.25%	3.24%	100.31%	45.26%	0.00%	0.00%
	2020	145.23%	122.61%	19.49%	101.67%	3.21%	100.42%	45.19%	0.00%	0.00%
	2030	175.25%	139.61%	19.06%	101.76%	3.21%	100.44%	45.47%	0.00%	0.00%
	2040	204.25%	157.14%	18.71%	101.08%	3.25%	100.27%	46.67%	0.00%	0.00%
	2050	232.62%	176.53%	18.26%	101.46%	3.23%	100.36%	48.15%	0.00%	0.00%
	2075	315.70%	224.20%	18.14%	101.80%	3.21%	100.45%	54.29%	0.00%	0.00%
	2100	428.52%	286.46%	17.99%	101.95%	3.20%	100.48%	63.17%	0.00%	0.00%
Scenario 8	2005	100.00%	100.00%	20.76%	100.00%	3.32%	100.00%	45.23%	0.00%	0.00%
	2010	114.96%	106.41%	20.41%	100.81%	3.27%	100.20%	45.24%	0.00%	0.00%
	2015	129.96%	114.13%	19.95%	101.25%	3.24%	100.31%	45.21%	0.00%	0.00%
	2020	145.23%	122.61%	19.49%	101.67%	3.21%	100.42%	45.13%	0.00%	0.00%
	2030	175.21%	139.63%	19.06%	101.76%	3.21%	100.44%	45.43%	0.00%	0.00%
	2040	204.07%	157.20%	18.71%	101.08%	3.25%	100.27%	46.63%	0.00%	0.00%
	2050	232.13%	176.68%	18.24%	101.45%	3.23%	100.36%	48.14%	0.00%	0.00%
	2075	312.64%	224.79%	18.09%	101.77%	3.21%	100.44%	54.45%	0.00%	0.00%
	2100	417.95%	287.73%	17.88%	101.89%	3.20%	100.47%	63.83%	0.00%	0.00%

Table 14 Simulation Results –PERU

		GNP	GNP per employee	Net national saving-GNP ratio	Capital-labor ratio	Interest rate	Wage rate	Debt-GDP ratio	Pension premium to wage	Pension burden-GDP ratio
Scenario 1	2005	100.00%	100.00%	21.99%	100.00%	3.31%	100.00%	29.20%	0.00%	0.00%
	2010	116.20%	106.32%	21.66%	100.88%	3.25%	100.22%	29.20%	0.00%	0.00%
	2015	133.85%	113.54%	21.35%	101.39%	3.22%	100.35%	29.22%	0.00%	0.00%
	2020	151.45%	121.85%	20.96%	101.70%	3.20%	100.42%	29.56%	0.00%	0.00%
	2030	184.20%	141.01%	20.23%	101.68%	3.20%	100.42%	31.10%	0.00%	0.00%
	2040	215.60%	160.43%	19.60%	100.97%	3.25%	100.24%	32.94%	0.00%	0.00%
	2050	245.28%	178.92%	19.26%	101.33%	3.23%	100.33%	35.39%	0.00%	0.00%
	2075	324.60%	227.28%	19.08%	101.66%	3.21%	100.41%	44.58%	0.00%	0.00%
	2100	432.31%	292.15%	18.69%	101.81%	3.20%	100.45%	57.47%	0.00%	0.00%
Scenario 2	2005	100.00%	100.00%	21.99%	100.00%	3.31%	100.00%	29.14%	0.00%	0.00%
	2010	116.20%	106.32%	21.66%	100.88%	3.25%	100.22%	29.14%	0.00%	0.00%
	2015	133.85%	113.55%	21.35%	101.39%	3.22%	100.35%	29.15%	0.00%	0.00%
	2020	151.45%	121.85%	20.96%	101.69%	3.20%	100.42%	29.50%	0.00%	0.00%
	2030	184.14%	141.03%	20.23%	101.68%	3.20%	100.42%	31.04%	0.00%	0.00%
	2040	215.33%	160.52%	19.59%	100.97%	3.25%	100.24%	32.89%	0.00%	0.00%
	2050	244.55%	179.15%	19.24%	101.32%	3.23%	100.33%	35.37%	0.00%	0.00%
	2075	320.20%	228.14%	19.00%	101.64%	3.21%	100.41%	44.81%	0.00%	0.00%
	2100	417.55%	294.06%	18.53%	101.76%	3.20%	100.44%	58.56%	0.00%	0.00%
Scenario 3	2005	100.00%	100.00%	21.99%	100.00%	3.31%	100.00%	29.14%	0.00%	0.00%
	2010	116.20%	106.32%	21.66%	100.88%	3.25%	100.22%	29.14%	0.00%	0.00%
	2015	133.85%	113.55%	21.35%	101.39%	3.22%	100.35%	29.16%	0.00%	0.00%
	2020	151.45%	121.85%	20.96%	101.69%	3.20%	100.42%	29.50%	0.00%	0.00%
	2030	184.14%	141.03%	20.23%	101.68%	3.20%	100.42%	31.04%	0.00%	0.00%
	2040	215.36%	160.51%	19.59%	100.97%	3.25%	100.24%	32.89%	0.00%	0.00%
	2050	244.71%	179.09%	19.24%	101.33%	3.23%	100.33%	35.36%	0.00%	0.00%
	2075	322.09%	227.65%	19.05%	101.65%	3.21%	100.41%	44.65%	0.00%	0.00%
	2100	426.15%	292.64%	18.65%	101.79%	3.20%	100.44%	57.79%	0.00%	0.00%

Table 14 Simulation Results – PERU (continued)

		GNP	GNP per employee	Net national saving-GNP ratio	Capital-labor ratio	Interest rate	Wage rate	Debt-GDP ratio	Pension premium to wage	Pension burden-GDP ratio
Scenario 4	2005	100.00%	100.00%	21.99%	100.00%	3.31%	100.00%	29.14%	0.00%	0.00%
	2010	116.20%	106.32%	21.66%	100.88%	3.25%	100.22%	29.14%	0.00%	0.00%
	2015	133.85%	113.55%	21.35%	101.39%	3.22%	100.35%	29.15%	0.00%	0.00%
	2020	151.46%	121.85%	20.96%	101.70%	3.20%	100.42%	29.50%	0.00%	0.00%
	2030	184.20%	141.02%	20.23%	101.68%	3.20%	100.42%	31.04%	0.00%	0.00%
	2040	215.53%	160.46%	19.60%	100.97%	3.25%	100.24%	32.87%	0.00%	0.00%
	2050	244.99%	179.02%	19.25%	101.33%	3.23%	100.33%	35.34%	0.00%	0.00%
	2075	322.03%	227.89%	19.03%	101.64%	3.21%	100.41%	44.68%	0.00%	0.00%
	2100	421.84%	293.73%	18.57%	101.77%	3.20%	100.44%	58.21%	0.00%	0.00%
Scenario 5	2005	100.00%	100.00%	21.99%	100.00%	3.31%	100.00%	29.14%	0.00%	0.00%
	2010	116.20%	106.32%	21.66%	100.88%	3.25%	100.22%	29.14%	0.00%	0.00%
	2015	133.85%	113.55%	21.35%	101.39%	3.22%	100.35%	29.15%	0.00%	0.00%
	2020	151.45%	121.85%	20.96%	101.69%	3.20%	100.42%	29.50%	0.00%	0.00%
	2030	184.17%	141.02%	20.23%	101.68%	3.20%	100.42%	31.04%	0.00%	0.00%
	2040	215.47%	160.48%	19.60%	100.97%	3.25%	100.24%	32.88%	0.00%	0.00%
	2050	244.91%	179.04%	19.25%	101.33%	3.23%	100.33%	35.34%	0.00%	0.00%
	2075	322.40%	227.71%	19.04%	101.65%	3.21%	100.41%	44.64%	0.00%	0.00%
	2100	424.90%	293.10%	18.62%	101.78%	3.20%	100.44%	57.93%	0.00%	0.00%
Scenario 6	2005	100.00%	100.00%	22.03%	100.00%	3.31%	100.00%	29.26%	0.00%	0.00%
	2010	116.19%	106.32%	21.70%	100.84%	3.26%	100.21%	29.26%	0.00%	0.00%
	2015	133.84%	113.54%	21.37%	101.30%	3.23%	100.32%	29.26%	0.00%	0.00%
	2020	151.46%	121.85%	20.95%	101.68%	3.21%	100.42%	29.57%	0.00%	0.00%
	2030	184.21%	141.02%	20.21%	101.73%	3.21%	100.43%	31.05%	0.00%	0.00%
	2040	215.60%	160.43%	19.59%	101.04%	3.25%	100.26%	32.84%	0.00%	0.00%
	2050	245.27%	178.92%	19.25%	101.41%	3.23%	100.35%	35.25%	0.00%	0.00%
	2075	324.59%	227.27%	19.09%	101.75%	3.21%	100.43%	44.36%	0.00%	0.00%
	2100	432.30%	292.14%	18.70%	101.90%	3.20%	100.47%	57.16%	0.00%	0.00%

Table 14 Simulation Results – PERU (continued)

		GNP	GNP per employee	Net national saving-GNP ratio	Capital-labor ratio	Interest rate	Wage rate	Debt-GDP ratio	Pension premium to wage	Pension burden-GDP ratio
Scenario 7	2005	100.00%	100.00%	22.06%	100.00%	3.32%	100.00%	29.30%	0.00%	0.00%
	2010	116.19%	106.32%	21.73%	100.81%	3.27%	100.20%	29.30%	0.00%	0.00%
	2015	133.84%	113.54%	21.38%	101.25%	3.24%	100.31%	29.28%	0.00%	0.00%
	2020	151.46%	121.85%	20.95%	101.67%	3.21%	100.42%	29.57%	0.00%	0.00%
	2030	184.21%	141.02%	20.20%	101.76%	3.21%	100.44%	31.02%	0.00%	0.00%
	2040	215.59%	160.43%	19.58%	101.08%	3.25%	100.27%	32.77%	0.00%	0.00%
	2050	245.26%	178.91%	19.25%	101.46%	3.23%	100.36%	35.17%	0.00%	0.00%
	2075	324.58%	227.26%	19.09%	101.80%	3.21%	100.45%	44.23%	0.00%	0.00%
	2100	432.29%	292.13%	18.70%	101.95%	3.20%	100.48%	56.97%	0.00%	0.00%
Scenario 8	2005	100.00%	100.00%	22.06%	100.00%	3.32%	100.00%	29.23%	0.00%	0.00%
	2010	116.19%	106.32%	21.73%	100.81%	3.27%	100.20%	29.23%	0.00%	0.00%
	2015	133.84%	113.54%	21.39%	101.25%	3.24%	100.31%	29.22%	0.00%	0.00%
	2020	151.46%	121.86%	20.95%	101.67%	3.21%	100.42%	29.51%	0.00%	0.00%
	2030	184.15%	141.04%	20.20%	101.76%	3.21%	100.44%	30.96%	0.00%	0.00%
	2040	215.33%	160.52%	19.57%	101.08%	3.25%	100.27%	32.73%	0.00%	0.00%
	2050	244.53%	179.14%	19.22%	101.45%	3.23%	100.36%	35.15%	0.00%	0.00%
	2075	320.18%	228.12%	19.01%	101.77%	3.21%	100.44%	44.46%	0.00%	0.00%
	2100	417.54%	294.05%	18.55%	101.89%	3.20%	100.47%	58.05%	0.00%	0.00%

Table 15 Simulation Results – AUSTRALIA

		GNP	GNP per employee	Net national saving-GNP ratio	Capital-labor ratio	Interest rate	Wage rate	Debt-GDP ratio	Pension premium to wage	Pension burden-GDP ratio
Scenario 1	2005	100.00%	100.00%	20.92%	100.00%	3.31%	100.00%	16.74%	11.42%	8.00%
	2010	113.03%	107.72%	20.46%	100.95%	3.25%	100.28%	15.41%	12.32%	8.62%
	2015	126.84%	116.51%	20.31%	101.49%	3.22%	100.45%	15.44%	13.54%	9.48%
	2020	140.98%	126.09%	19.87%	101.82%	3.20%	100.54%	15.99%	14.88%	10.42%
	2030	166.75%	144.42%	19.57%	101.80%	3.20%	100.54%	19.31%	16.66%	11.66%
	2040	190.69%	159.96%	19.74%	101.04%	3.25%	100.31%	25.03%	17.16%	12.01%
	2050	217.08%	174.48%	20.22%	101.43%	3.23%	100.43%	32.44%	16.78%	11.75%
	2075	298.31%	223.52%	20.26%	101.78%	3.21%	100.53%	59.39%	17.24%	12.07%
	2100	409.49%	284.71%	19.66%	101.94%	3.20%	100.58%	98.17%	17.31%	12.11%
Scenario 2	2005	100.00%	100.00%	20.92%	100.00%	3.31%	100.00%	16.68%	11.42%	8.00%
	2010	113.03%	107.72%	20.46%	100.95%	3.25%	100.28%	15.35%	12.32%	8.62%
	2015	126.84%	116.52%	20.32%	101.49%	3.22%	100.44%	15.38%	13.54%	9.48%
	2020	140.98%	126.09%	19.87%	101.82%	3.20%	100.54%	15.92%	14.88%	10.42%
	2030	166.75%	144.43%	19.57%	101.80%	3.20%	100.54%	19.25%	16.66%	11.66%
	2040	190.67%	159.98%	19.74%	101.04%	3.25%	100.31%	24.96%	17.16%	12.01%
	2050	217.01%	174.52%	20.23%	101.42%	3.23%	100.42%	32.38%	16.79%	11.75%
	2075	297.69%	223.71%	20.26%	101.75%	3.21%	100.52%	59.44%	17.28%	12.09%
	2100	407.01%	285.17%	19.66%	101.88%	3.20%	100.56%	98.71%	17.39%	12.17%
Scenario 3	2005	100.00%	100.00%	20.92%	100.00%	3.31%	100.00%	16.68%	11.42%	8.00%
	2010	113.03%	107.72%	20.46%	100.95%	3.25%	100.28%	15.35%	12.32%	8.62%
	2015	126.84%	116.52%	20.32%	101.49%	3.22%	100.45%	15.38%	13.54%	9.48%
	2020	140.98%	126.09%	19.87%	101.82%	3.20%	100.54%	15.93%	14.88%	10.42%
	2030	166.75%	144.43%	19.57%	101.80%	3.20%	100.54%	19.25%	16.66%	11.66%
	2040	190.67%	159.98%	19.74%	101.04%	3.25%	100.31%	24.96%	17.16%	12.01%
	2050	217.02%	174.51%	20.23%	101.42%	3.23%	100.42%	32.37%	16.79%	11.75%
	2075	297.93%	223.62%	20.26%	101.77%	3.21%	100.53%	59.37%	17.26%	12.08%
	2100	408.34%	284.85%	19.66%	101.92%	3.20%	100.57%	98.34%	17.33%	12.13%

Table 15 Simulation Results – AUSTRALIA (continued)

		GNP	GNP per employee	Net national saving-GNP ratio	Capital-labor ratio	Interest rate	Wage rate	Debt-GDP ratio	Pension premium to wage	Pension burden-GDP ratio
Scenario 4	2005	100.00%	100.00%	20.92%	100.00%	3.31%	100.00%	16.68%	11.42%	8.00%
	2010	113.03%	107.72%	20.46%	100.95%	3.25%	100.28%	15.35%	12.32%	8.62%
	2015	126.84%	116.52%	20.32%	101.49%	3.22%	100.44%	15.38%	13.54%	9.48%
	2020	140.98%	126.09%	19.87%	101.82%	3.20%	100.54%	15.92%	14.88%	10.42%
	2030	166.75%	144.43%	19.57%	101.80%	3.20%	100.54%	19.24%	16.66%	11.66%
	2040	190.69%	159.97%	19.74%	101.04%	3.25%	100.31%	24.95%	17.16%	12.01%
	2050	217.06%	174.50%	20.23%	101.42%	3.23%	100.42%	32.36%	16.79%	11.75%
	2075	297.97%	223.64%	20.27%	101.76%	3.21%	100.53%	59.37%	17.26%	12.08%
	2100	407.83%	285.08%	19.66%	101.90%	3.20%	100.57%	98.48%	17.37%	12.16%
Scenario 5	2005	100.00%	100.00%	20.92%	100.00%	3.31%	100.00%	16.68%	11.42%	8.00%
	2010	113.03%	107.72%	20.46%	100.95%	3.25%	100.28%	15.35%	12.32%	8.62%
	2015	126.84%	116.52%	20.32%	101.49%	3.22%	100.45%	15.38%	13.54%	9.48%
	2020	140.98%	126.09%	19.87%	101.82%	3.20%	100.54%	15.93%	14.88%	10.42%
	2030	166.75%	144.43%	19.57%	101.80%	3.20%	100.54%	19.25%	16.66%	11.66%
	2040	190.68%	159.97%	19.74%	101.04%	3.25%	100.31%	24.96%	17.16%	12.01%
	2050	217.05%	174.50%	20.23%	101.42%	3.23%	100.42%	32.37%	16.79%	11.75%
	2075	298.01%	223.62%	20.26%	101.77%	3.21%	100.53%	59.36%	17.26%	12.08%
	2100	408.26%	284.94%	19.66%	101.91%	3.20%	100.57%	98.37%	17.35%	12.14%
Scenario 6	2005	100.00%	100.00%	20.96%	100.00%	3.31%	100.00%	16.81%	11.43%	8.00%
	2010	113.02%	107.71%	20.49%	100.90%	3.26%	100.27%	15.48%	12.33%	8.63%
	2015	126.82%	116.49%	20.32%	101.39%	3.23%	100.42%	15.48%	13.56%	9.49%
	2020	140.98%	126.08%	19.86%	101.80%	3.21%	100.54%	15.99%	14.91%	10.43%
	2030	166.75%	144.43%	19.54%	101.86%	3.21%	100.55%	19.26%	16.68%	11.68%
	2040	190.69%	159.96%	19.71%	101.12%	3.25%	100.33%	24.94%	17.17%	12.02%
	2050	217.08%	174.47%	20.21%	101.51%	3.23%	100.45%	32.33%	16.79%	11.76%
	2075	298.30%	223.51%	20.26%	101.87%	3.21%	100.56%	59.24%	17.24%	12.07%
	2100	409.48%	284.71%	19.67%	102.03%	3.20%	100.61%	97.98%	17.31%	12.11%

Table 15 Simulation Results – AUSTRALIA (continued)

		GNP	GNP per employee	Net national saving-GNP ratio	Capital-labor ratio	Interest rate	Wage rate	Debt-GDP ratio	Pension premium to wage	Pension burden-GDP ratio
Scenario 7	2005	100.00%	100.00%	20.99%	100.00%	3.32%	100.00%	16.85%	11.44%	8.00%
	2010	113.02%	107.71%	20.51%	100.86%	3.27%	100.26%	15.51%	12.34%	8.64%
	2015	126.81%	116.48%	20.33%	101.34%	3.24%	100.40%	15.50%	13.57%	9.50%
	2020	140.97%	126.08%	19.85%	101.79%	3.21%	100.53%	15.99%	14.92%	10.44%
	2030	166.76%	144.43%	19.52%	101.89%	3.21%	100.56%	19.23%	16.69%	11.68%
	2040	190.68%	159.96%	19.70%	101.16%	3.25%	100.35%	24.89%	17.18%	12.03%
	2050	217.07%	174.47%	20.20%	101.56%	3.23%	100.47%	32.25%	16.80%	11.76%
	2075	298.29%	223.50%	20.27%	101.93%	3.21%	100.57%	59.14%	17.24%	12.07%
	2100	409.48%	284.70%	19.67%	102.09%	3.20%	100.62%	97.84%	17.31%	12.11%
Scenario 8	2005	100.00%	100.00%	20.99%	100.00%	3.32%	100.00%	16.79%	11.44%	8.00%
	2010	113.02%	107.71%	20.52%	100.86%	3.27%	100.26%	15.46%	12.34%	8.64%
	2015	126.81%	116.48%	20.33%	101.34%	3.24%	100.40%	15.44%	13.57%	9.50%
	2020	140.98%	126.08%	19.85%	101.79%	3.21%	100.53%	15.93%	14.92%	10.44%
	2030	166.75%	144.43%	19.53%	101.89%	3.21%	100.56%	19.17%	16.69%	11.68%
	2040	190.66%	159.97%	19.71%	101.16%	3.25%	100.35%	24.83%	17.19%	12.03%
	2050	216.99%	174.51%	20.21%	101.56%	3.23%	100.46%	32.20%	16.81%	11.77%
	2075	297.68%	223.70%	20.27%	101.90%	3.21%	100.57%	59.20%	17.28%	12.09%
	2100	407.01%	285.17%	19.67%	102.03%	3.20%	100.61%	98.39%	17.39%	12.17%

Table 16 Simulation Results – CANADA

		GNP	GNP per employee	Net national saving-GNP ratio	Capital-labor ratio	Interest rate	Wage rate	Debt-GDP ratio	Pension premium to wage	Pension burden-GDP ratio
Scenario 1	2005	100.00%	100.00%	20.01%	100.00%	3.31%	100.00%	78.41	11.58%	8.10%
	2010	111.77%	107.56%	18.19%	100.95%	3.25%	100.28%	68.45	12.34%	8.64%
	2015	123.75%	116.62%	18.02%	101.49%	3.22%	100.45%	68.50	13.78%	9.64%
	2020	135.08%	127.47%	17.51%	101.82%	3.20%	100.54%	69.80	15.70%	10.99%
	2030	152.78%	148.08%	16.74%	101.80%	3.20%	100.54%	77.71	18.51%	12.96%
	2040	164.62%	158.03%	17.32%	101.04%	3.25%	100.31%	92.57	17.61%	12.33%
	2050	180.53%	171.28%	18.23%	101.43%	3.23%	100.43%	109.81	16.88%	11.82%
	2075	225.61%	217.66%	17.38%	101.78%	3.21%	100.53%	171.31	17.49%	12.24%
	2100	282.37%	276.00%	15.29%	101.94%	3.20%	100.58%	262.30	17.97%	12.58%
Scenario 2	2005	100.00%	100.00%	20.01%	100.00%	3.31%	100.00%	78.35	11.58%	8.10%
	2010	111.77%	107.56%	18.20%	100.95%	3.25%	100.28%	68.39	12.34%	8.64%
	2015	123.75%	116.62%	18.02%	101.49%	3.22%	100.44%	68.44	13.78%	9.64%
	2020	135.08%	127.47%	17.51%	101.82%	3.20%	100.54%	69.74	15.70%	10.99%
	2030	152.78%	148.09%	16.75%	101.80%	3.20%	100.54%	77.64	18.51%	12.96%
	2040	164.61%	158.04%	17.33%	101.04%	3.25%	100.31%	92.50	17.62%	12.33%
	2050	180.50%	171.31%	18.24%	101.42%	3.23%	100.42%	109.75	16.88%	11.82%
	2075	225.33%	217.77%	17.39%	101.75%	3.21%	100.52%	171.43	17.51%	12.26%
	2100	281.26%	276.22%	15.27%	101.88%	3.20%	100.56%	263.26	18.03%	12.62%
Scenario 3	2005	100.00%	100.00%	20.01%	100.00%	3.31%	100.00%	78.35	11.58%	8.10%
	2010	111.77%	107.56%	18.20%	100.95%	3.25%	100.28%	68.39	12.34%	8.64%
	2015	123.75%	116.62%	18.02%	101.49%	3.22%	100.45%	68.44	13.78%	9.64%
	2020	135.08%	127.47%	17.51%	101.82%	3.20%	100.54%	69.74	15.70%	10.99%
	2030	152.78%	148.09%	16.75%	101.80%	3.20%	100.54%	77.64	18.51%	12.96%
	2040	164.61%	158.04%	17.33%	101.04%	3.25%	100.31%	92.49	17.62%	12.33%
	2050	180.51%	171.30%	18.23%	101.42%	3.23%	100.42%	109.74	16.88%	11.82%
	2075	225.44%	217.72%	17.38%	101.77%	3.21%	100.53%	171.32	17.50%	12.25%
	2100	281.87%	276.06%	15.28%	101.92%	3.20%	100.57%	262.61	17.99%	12.60%

Table 16 Simulation Results – CANADA (continued)

		GNP	GNP per employee	Net national saving-GNP ratio	Capital-labor ratio	Interest rate	Wage rate	Debt-GDP ratio	Pension premium to wage	Pension burden-GDP ratio
Scenario 4	2005	100.00%	100.00%	20.01%	100.00%	3.31%	100.00%	78.35	11.58%	8.10%
	2010	111.77%	107.56%	18.20%	100.95%	3.25%	100.28%	68.39	12.34%	8.64%
	2015	123.75%	116.62%	18.02%	101.49%	3.22%	100.44%	68.44	13.78%	9.64%
	2020	135.08%	127.47%	17.51%	101.82%	3.20%	100.54%	69.74	15.70%	10.99%
	2030	152.78%	148.09%	16.74%	101.80%	3.20%	100.54%	77.64	18.51%	12.96%
	2040	164.62%	158.03%	17.33%	101.04%	3.25%	100.31%	92.49	17.62%	12.33%
	2050	180.52%	171.30%	18.23%	101.42%	3.23%	100.42%	109.72	16.88%	11.82%
	2075	225.46%	217.73%	17.39%	101.76%	3.21%	100.53%	171.31	17.50%	12.25%
	2100	281.62%	276.19%	15.28%	101.90%	3.20%	100.57%	262.88	18.02%	12.61%
Scenario 5	2005	100.00%	100.00%	20.01%	100.00%	3.31%	100.00%	78.35	11.58%	8.10%
	2010	111.77%	107.56%	18.20%	100.95%	3.25%	100.28%	68.39	12.34%	8.64%
	2015	123.75%	116.62%	18.02%	101.49%	3.22%	100.45%	68.44	13.78%	9.64%
	2020	135.08%	127.47%	17.51%	101.82%	3.20%	100.54%	69.74	15.70%	10.99%
	2030	152.78%	148.09%	16.74%	101.80%	3.20%	100.54%	77.64	18.51%	12.96%
	2040	164.62%	158.03%	17.33%	101.04%	3.25%	100.31%	92.49	17.62%	12.33%
	2050	180.52%	171.30%	18.23%	101.42%	3.23%	100.42%	109.73	16.88%	11.82%
	2075	225.48%	217.72%	17.39%	101.77%	3.21%	100.53%	171.30	17.50%	12.25%
	2100	281.82%	276.11%	15.28%	101.91%	3.20%	100.57%	262.67	18.00%	12.60%
Scenario 6	2005	100.00%	100.00%	20.06%	100.00%	3.31%	100.00%	78.53	11.58%	8.11%
	2010	111.76%	107.55%	18.23%	100.90%	3.26%	100.27%	68.59	12.36%	8.65%
	2015	123.72%	116.60%	18.02%	101.39%	3.23%	100.42%	68.65	13.80%	9.66%
	2020	135.07%	127.46%	17.48%	101.80%	3.21%	100.54%	69.91	15.73%	11.01%
	2030	152.78%	148.08%	16.70%	101.86%	3.21%	100.55%	77.77	18.54%	12.97%
	2040	164.61%	158.02%	17.29%	101.12%	3.25%	100.33%	92.61	17.63%	12.34%
	2050	180.52%	171.27%	18.21%	101.51%	3.23%	100.45%	109.84	16.89%	11.82%
	2075	225.59%	217.65%	17.38%	101.87%	3.21%	100.56%	171.35	17.49%	12.24%
	2100	282.35%	275.98%	15.29%	102.03%	3.20%	100.61%	262.37	17.97%	12.58%

Table 16 Simulation Results – CANADA (continued)

		GNP	GNP per employee	Net national saving-GNP ratio	Capital-labor ratio	Interest rate	Wage rate	Debt-GDP ratio	Pension premium to wage	Pension burden-GDP ratio
Scenario 7	2005	100.00%	100.00%	20.08%	100.00%	3.32%	100.00%	78.61	11.59%	8.11%
	2010	111.76%	107.54%	18.24%	100.86%	3.27%	100.26%	68.67	12.36%	8.65%
	2015	123.71%	116.59%	18.02%	101.34%	3.24%	100.40%	68.73	13.81%	9.67%
	2020	135.07%	127.46%	17.47%	101.79%	3.21%	100.53%	69.98	15.74%	11.02%
	2030	152.77%	148.08%	16.68%	101.89%	3.21%	100.56%	77.81	18.55%	12.98%
	2040	164.61%	158.02%	17.28%	101.16%	3.25%	100.35%	92.63	17.64%	12.35%
	2050	180.51%	171.27%	18.20%	101.56%	3.23%	100.47%	109.86	16.89%	11.83%
	2075	225.58%	217.64%	17.39%	101.93%	3.21%	100.57%	171.37	17.49%	12.24%
	2100	282.34%	275.97%	15.29%	102.09%	3.20%	100.62%	262.41	17.97%	12.58%
Scenario 8	2005	100.00%	100.00%	20.08%	100.00%	3.32%	100.00%	78.55	11.59%	8.11%
	2010	111.76%	107.55%	18.25%	100.86%	3.27%	100.26%	68.61	12.36%	8.65%
	2015	123.71%	116.59%	18.03%	101.34%	3.24%	100.40%	68.67	13.81%	9.67%
	2020	135.07%	127.46%	17.47%	101.79%	3.21%	100.53%	69.91	15.74%	11.02%
	2030	152.78%	148.09%	16.69%	101.89%	3.21%	100.56%	77.74	18.55%	12.99%
	2040	164.60%	158.03%	17.28%	101.16%	3.25%	100.35%	92.56	17.64%	12.35%
	2050	180.48%	171.29%	18.21%	101.56%	3.23%	100.46%	109.79	16.90%	11.83%
	2075	225.31%	217.74%	17.39%	101.90%	3.21%	100.57%	171.50	17.51%	12.26%
	2100	281.23%	276.19%	15.27%	102.03%	3.20%	100.61%	263.37	18.03%	12.62%

Table 17 Simulation Results –EUROPE

		GNP	GNP per employee	Net national saving-GNP ratio	Capital-labor ratio	Interest rate	Wage rate	Debt-GDP ratio	Pension premium to wage	Pension burden-GDP ratio
Scenario 1	2005	100.00%	100.00%	13.91%	100.00%	3.31%	100.00%	76.99%	19.13%	13.39%
	2010	106.17%	105.39%	15.50%	100.95%	3.25%	100.28%	71.36%	18.72%	13.10%
	2015	111.72%	112.73%	15.78%	101.49%	3.22%	100.45%	71.40%	19.47%	13.63%
	2020	116.47%	121.77%	15.61%	101.82%	3.20%	100.54%	72.30%	20.98%	14.69%
	2030	122.23%	138.04%	15.59%	101.80%	3.20%	100.54%	78.63%	22.63%	15.84%
	2040	125.20%	151.35%	15.69%	101.04%	3.25%	100.31%	90.15%	22.71%	15.90%
	2050	127.52%	169.81%	15.49%	101.43%	3.23%	100.43%	106.60%	24.05%	16.84%
	2075	128.08%	208.80%	14.82%	101.78%	3.21%	100.53%	181.31%	22.91%	16.04%
	2100	127.06%	257.29%	11.45%	101.94%	3.20%	100.58%	320.09%	22.91%	16.04%
Scenario 2	2005	100.08%	100.08%	13.98%	100.00%	3.31%	100.00%	74.24%	19.13%	13.39%
	2010	106.26%	105.47%	15.57%	100.95%	3.25%	100.28%	68.41%	18.72%	13.10%
	2015	111.82%	112.83%	15.85%	101.49%	3.22%	100.44%	68.22%	19.47%	13.63%
	2020	116.57%	121.88%	15.68%	101.82%	3.20%	100.54%	68.84%	20.98%	14.69%
	2030	122.37%	138.19%	15.69%	101.80%	3.20%	100.54%	74.42%	22.63%	15.84%
	2040	125.37%	151.57%	15.81%	101.04%	3.25%	100.31%	84.88%	22.71%	15.90%
	2050	127.74%	170.12%	15.64%	101.42%	3.23%	100.42%	99.98%	24.05%	16.84%
	2075	128.44%	209.52%	15.12%	101.75%	3.21%	100.52%	169.29%	22.93%	16.05%
	2100	127.63%	258.95%	12.00%	101.88%	3.20%	100.56%	298.69%	22.95%	16.06%
Scenario 3	2005	100.08%	100.08%	13.98%	100.00%	3.31%	100.00%	74.25%	19.13%	13.39%
	2010	106.26%	105.47%	15.57%	100.95%	3.25%	100.28%	68.42%	18.72%	13.10%
	2015	111.82%	112.83%	15.85%	101.49%	3.22%	100.45%	68.22%	19.47%	13.63%
	2020	116.57%	121.88%	15.68%	101.82%	3.20%	100.54%	68.85%	20.98%	14.69%
	2030	122.37%	138.19%	15.69%	101.80%	3.20%	100.54%	74.42%	22.63%	15.84%
	2040	125.37%	151.57%	15.81%	101.04%	3.25%	100.31%	84.88%	22.71%	15.90%
	2050	127.75%	170.12%	15.64%	101.42%	3.23%	100.42%	99.98%	24.05%	16.84%
	2075	128.48%	209.52%	15.11%	101.77%	3.21%	100.53%	169.24%	22.92%	16.05%
	2100	127.78%	258.94%	12.01%	101.92%	3.20%	100.57%	298.27%	22.92%	16.05%

Table 17 Simulation Results – EUROPE (continued)

		GNP	GNP per employee	Net national saving-GNP ratio	Capital-labor ratio	Interest rate	Wage rate	Debt-GDP ratio	Pension premium to wage	Pension burden-GDP ratio
Scenario 4	2005	100.08%	100.08%	13.98%	100.00%	3.31%	100.00%	74.24%	19.13%	13.39%
	2010	106.26%	105.47%	15.57%	100.95%	3.25%	100.28%	68.41%	18.72%	13.10%
	2015	111.81%	112.83%	15.85%	101.49%	3.22%	100.44%	68.21%	19.47%	13.63%
	2020	116.57%	121.88%	15.68%	101.82%	3.20%	100.54%	68.84%	20.98%	14.69%
	2030	122.37%	138.19%	15.69%	101.80%	3.20%	100.54%	74.41%	22.63%	15.84%
	2040	125.38%	151.57%	15.81%	101.04%	3.25%	100.31%	84.86%	22.71%	15.90%
	2050	127.75%	170.12%	15.64%	101.42%	3.23%	100.42%	99.96%	24.05%	16.84%
	2075	128.47%	209.52%	15.12%	101.76%	3.21%	100.53%	169.20%	22.92%	16.05%
	2100	127.70%	258.96%	12.01%	101.90%	3.20%	100.57%	298.39%	22.94%	16.06%
Scenario 5	2005	100.08%	100.08%	13.98%	100.00%	3.31%	100.00%	74.25%	19.13%	13.39%
	2010	106.26%	105.47%	15.57%	100.95%	3.25%	100.28%	68.42%	18.72%	13.10%
	2015	111.82%	112.83%	15.85%	101.49%	3.22%	100.45%	68.22%	19.47%	13.63%
	2020	116.57%	121.88%	15.68%	101.82%	3.20%	100.54%	68.85%	20.98%	14.69%
	2030	122.37%	138.19%	15.69%	101.80%	3.20%	100.54%	74.42%	22.63%	15.84%
	2040	125.38%	151.57%	15.81%	101.04%	3.25%	100.31%	84.88%	22.71%	15.90%
	2050	127.75%	170.12%	15.64%	101.42%	3.23%	100.42%	99.98%	24.05%	16.84%
	2075	128.48%	209.52%	15.11%	101.77%	3.21%	100.53%	169.23%	22.92%	16.05%
	2100	127.76%	258.95%	12.01%	101.91%	3.20%	100.57%	298.33%	22.93%	16.05%
Scenario 6	2005	100.00%	100.00%	13.94%	100.00%	3.31%	100.00%	77.12%	19.14%	13.40%
	2010	106.15%	105.37%	15.51%	100.90%	3.26%	100.27%	71.52%	18.74%	13.12%
	2015	111.68%	112.69%	15.76%	101.39%	3.23%	100.42%	71.57%	19.50%	13.65%
	2020	116.46%	121.76%	15.58%	101.80%	3.21%	100.54%	72.45%	21.01%	14.71%
	2030	122.24%	138.05%	15.56%	101.86%	3.21%	100.55%	78.74%	22.66%	15.86%
	2040	125.20%	151.36%	15.67%	101.12%	3.25%	100.33%	90.25%	22.73%	15.91%
	2050	127.53%	169.82%	15.47%	101.51%	3.23%	100.45%	106.71%	24.06%	16.84%
	2075	128.09%	208.81%	14.82%	101.87%	3.21%	100.56%	181.54%	22.92%	16.04%
	2100	127.07%	257.30%	11.44%	102.03%	3.20%	100.61%	320.52%	22.91%	16.04%

Table 17 Simulation Results – EUROPE (continued)

		GNP	GNP per employee	Net national saving-GNP ratio	Capital-labor ratio	Interest rate	Wage rate	Debt-GDP ratio	Pension premium to wage	Pension burden-GDP ratio
Scenario 7	2005	100.00%	100.00%	13.95%	100.00%	3.32%	100.00%	77.20	19.15%	13.40%
	2010	106.14%	105.36%	15.52%	100.86%	3.27%	100.26%	71.61	18.75%	13.13%
	2015	111.66%	112.67%	15.75%	101.34%	3.24%	100.40%	71.67	19.52%	13.66%
	2020	116.45%	121.75%	15.56%	101.79%	3.21%	100.53%	72.53	21.03%	14.72%
	2030	122.24%	138.05%	15.54%	101.89%	3.21%	100.56%	78.80	22.67%	15.87%
	2040	125.21%	151.36%	15.65%	101.16%	3.25%	100.35%	90.29	22.74%	15.92%
	2050	127.54%	169.82%	15.47%	101.56%	3.23%	100.47%	106.76	24.07%	16.85%
	2075	128.09%	208.82%	14.82%	101.93%	3.21%	100.57%	181.63	22.92%	16.04%
	2100	127.07%	257.30%	11.43%	102.09%	3.20%	100.62%	320.66	22.91%	16.04%
Scenario 8	2005	100.08%	100.08%	14.02%	100.00%	3.32%	100.00%	74.46	19.15%	13.40%
	2010	106.23%	105.45%	15.59%	100.86%	3.27%	100.26%	68.67	18.75%	13.13%
	2015	111.76%	112.77%	15.83%	101.34%	3.24%	100.40%	68.49	19.52%	13.66%
	2020	116.56%	121.86%	15.64%	101.79%	3.21%	100.53%	69.07	21.03%	14.72%
	2030	122.38%	138.21%	15.64%	101.89%	3.21%	100.56%	74.58	22.67%	15.87%
	2040	125.39%	151.58%	15.78%	101.16%	3.25%	100.35%	85.02	22.74%	15.92%
	2050	127.76%	170.14%	15.63%	101.56%	3.23%	100.46%	100.14	24.07%	16.85%
	2075	128.46%	209.55%	15.11%	101.90%	3.21%	100.57%	169.63	22.93%	16.05%
	2100	127.64%	258.96%	11.99%	102.03%	3.20%	100.61%	299.33	22.95%	16.06%

Table 18 Simulation Results – REST OF WORLD

		GNP	GNP per employee	Net national saving-GNP ratio	Capital-labor ratio	Interest rate	Wage rate	Debt-GDP ratio	Pension premium to wage	Pension burden-GDP ratio
Scenario 1	2005	100.00%	100.00%	19.26%	100.00%	3.31%	100.00%	43.51%	0.00%	0.00%
	2010	118.39%	105.82%	19.12%	100.88%	3.25%	100.22%	43.51%	0.00%	0.00%
	2015	138.87%	112.31%	19.04%	101.39%	3.22%	100.35%	43.53%	0.00%	0.00%
	2020	160.67%	119.19%	18.90%	101.70%	3.20%	100.42%	44.01%	0.00%	0.00%
	2030	210.37%	133.74%	18.83%	101.68%	3.20%	100.42%	45.76%	0.00%	0.00%
	2040	270.82%	149.16%	18.55%	100.97%	3.25%	100.24%	47.96%	0.00%	0.00%
	2050	340.56%	166.32%	18.24%	101.33%	3.23%	100.33%	50.86%	0.00%	0.00%
	2075	575.27%	215.97%	17.52%	101.66%	3.21%	100.41%	59.72%	0.00%	0.00%
	2100	908.79%	278.08%	17.03%	101.81%	3.20%	100.45%	72.93%	0.00%	0.00%
Scenario 2	2005	100.00%	100.00%	19.26%	100.00%	3.31%	100.00%	43.41%	0.00%	0.00%
	2010	118.39%	105.82%	19.12%	100.88%	3.25%	100.22%	43.41%	0.00%	0.00%
	2015	138.88%	112.31%	19.04%	101.39%	3.22%	100.35%	43.44%	0.00%	0.00%
	2020	160.68%	119.19%	18.90%	101.69%	3.20%	100.42%	43.92%	0.00%	0.00%
	2030	210.38%	133.74%	18.83%	101.68%	3.20%	100.42%	45.67%	0.00%	0.00%
	2040	270.83%	149.16%	18.55%	100.97%	3.25%	100.24%	47.88%	0.00%	0.00%
	2050	340.58%	166.32%	18.25%	101.32%	3.23%	100.33%	50.77%	0.00%	0.00%
	2075	575.38%	215.97%	17.53%	101.64%	3.21%	100.41%	59.63%	0.00%	0.00%
	2100	909.33%	278.06%	17.05%	101.76%	3.20%	100.44%	72.82%	0.00%	0.00%
Scenario 3	2005	100.00%	100.00%	19.26%	100.00%	3.31%	100.00%	43.41%	0.00%	0.00%
	2010	118.39%	105.82%	19.12%	100.88%	3.25%	100.22%	43.41%	0.00%	0.00%
	2015	138.88%	112.31%	19.04%	101.39%	3.22%	100.35%	43.44%	0.00%	0.00%
	2020	160.68%	119.19%	18.90%	101.69%	3.20%	100.42%	43.92%	0.00%	0.00%
	2030	210.38%	133.74%	18.83%	101.68%	3.20%	100.42%	45.67%	0.00%	0.00%
	2040	270.83%	149.16%	18.55%	100.97%	3.25%	100.24%	47.87%	0.00%	0.00%
	2050	340.58%	166.32%	18.25%	101.33%	3.23%	100.33%	50.77%	0.00%	0.00%
	2075	575.42%	215.97%	17.53%	101.65%	3.21%	100.41%	59.61%	0.00%	0.00%
	2100	909.51%	278.05%	17.04%	101.79%	3.20%	100.44%	72.78%	0.00%	0.00%

Table 18 Simulation Results – REST OF WORLD (continued)

		GNP	GNP per employee	Net national saving-GNP ratio	Capital-labor ratio	Interest rate	Wage rate	Debt-GDP ratio	Pension premium to wage	Pension burden-GDP ratio
Scenario 4	2005	100.00%	100.00%	19.26%	100.00%	3.31%	100.00%	43.41%	0.00%	0.00%
	2010	118.39%	105.82%	19.12%	100.88%	3.25%	100.22%	43.41%	0.00%	0.00%
	2015	138.88%	112.31%	19.04%	101.39%	3.22%	100.35%	43.44%	0.00%	0.00%
	2020	160.68%	119.19%	18.90%	101.70%	3.20%	100.42%	43.91%	0.00%	0.00%
	2030	210.38%	133.74%	18.83%	101.68%	3.20%	100.42%	45.67%	0.00%	0.00%
	2040	270.83%	149.16%	18.55%	100.97%	3.25%	100.24%	47.87%	0.00%	0.00%
	2050	340.57%	166.32%	18.25%	101.33%	3.23%	100.33%	50.77%	0.00%	0.00%
	2075	575.32%	215.97%	17.53%	101.64%	3.21%	100.41%	59.62%	0.00%	0.00%
	2100	909.08%	278.07%	17.05%	101.77%	3.20%	100.44%	72.82%	0.00%	0.00%
Scenario 5	2005	100.00%	100.00%	19.26%	100.00%	3.31%	100.00%	43.41%	0.00%	0.00%
	2010	118.39%	105.82%	19.12%	100.88%	3.25%	100.22%	43.41%	0.00%	0.00%
	2015	138.88%	112.31%	19.04%	101.39%	3.22%	100.35%	43.44%	0.00%	0.00%
	2020	160.68%	119.19%	18.90%	101.69%	3.20%	100.42%	43.92%	0.00%	0.00%
	2030	210.38%	133.74%	18.83%	101.68%	3.20%	100.42%	45.67%	0.00%	0.00%
	2040	270.83%	149.16%	18.55%	100.97%	3.25%	100.24%	47.87%	0.00%	0.00%
	2050	340.58%	166.32%	18.25%	101.33%	3.23%	100.33%	50.77%	0.00%	0.00%
	2075	575.37%	215.97%	17.53%	101.65%	3.21%	100.41%	59.62%	0.00%	0.00%
	2100	909.31%	278.06%	17.04%	101.78%	3.20%	100.44%	72.80%	0.00%	0.00%
Scenario 6	2005	100.00%	100.00%	19.30%	100.00%	3.31%	100.00%	43.59%	0.00%	0.00%
	2010	118.38%	105.81%	19.16%	100.84%	3.26%	100.21%	43.59%	0.00%	0.00%
	2015	138.86%	112.30%	19.05%	101.30%	3.23%	100.32%	43.60%	0.00%	0.00%
	2020	160.67%	119.19%	18.90%	101.68%	3.21%	100.42%	44.04%	0.00%	0.00%
	2030	210.38%	133.74%	18.81%	101.73%	3.21%	100.43%	45.74%	0.00%	0.00%
	2040	270.82%	149.16%	18.54%	101.04%	3.25%	100.26%	47.90%	0.00%	0.00%
	2050	340.56%	166.32%	18.24%	101.41%	3.23%	100.35%	50.78%	0.00%	0.00%
	2075	575.26%	215.97%	17.52%	101.75%	3.21%	100.43%	59.61%	0.00%	0.00%
	2100	908.78%	278.07%	17.03%	101.90%	3.20%	100.47%	72.81%	0.00%	0.00%

Table 18 Simulation Results – REST OF WORLD (continued)

		GNP	GNP per employee	Net national saving-GNP ratio	Capital-labor ratio	Interest rate	Wage rate	Debt-GDP ratio	Pension premium to wage	Pension burden-GDP ratio
Scenario 7	2005	100.00%	100.00%	19.33%	100.00%	3.32%	100.00%	43.63%	0.00%	0.00%
	2010	118.38%	105.81%	19.18%	100.81%	3.27%	100.20%	43.64%	0.00%	0.00%
	2015	138.85%	112.29%	19.07%	101.25%	3.24%	100.31%	43.64%	0.00%	0.00%
	2020	160.67%	119.19%	18.89%	101.67%	3.21%	100.42%	44.06%	0.00%	0.00%
	2030	210.38%	133.74%	18.80%	101.76%	3.21%	100.44%	45.72%	0.00%	0.00%
	2040	270.82%	149.16%	18.53%	101.08%	3.25%	100.27%	47.87%	0.00%	0.00%
	2050	340.56%	166.32%	18.23%	101.46%	3.23%	100.36%	50.73%	0.00%	0.00%
	2075	575.25%	215.96%	17.52%	101.80%	3.21%	100.45%	59.55%	0.00%	0.00%
	2100	908.77%	278.07%	17.03%	101.95%	3.20%	100.48%	72.73%	0.00%	0.00%
Scenario 8	2005	100.00%	100.00%	19.33%	100.00%	3.32%	100.00%	43.53%	0.00%	0.00%
	2010	118.38%	105.81%	19.18%	100.81%	3.27%	100.20%	43.54%	0.00%	0.00%
	2015	138.85%	112.30%	19.07%	101.25%	3.24%	100.31%	43.55%	0.00%	0.00%
	2020	160.67%	119.19%	18.90%	101.67%	3.21%	100.42%	43.97%	0.00%	0.00%
	2030	210.39%	133.75%	18.81%	101.76%	3.21%	100.44%	45.64%	0.00%	0.00%
	2040	270.83%	149.16%	18.54%	101.08%	3.25%	100.27%	47.78%	0.00%	0.00%
	2050	340.57%	166.32%	18.24%	101.45%	3.23%	100.36%	50.64%	0.00%	0.00%
	2075	575.36%	215.96%	17.53%	101.77%	3.21%	100.44%	59.46%	0.00%	0.00%
	2100	909.31%	278.06%	17.05%	101.89%	3.20%	100.47%	72.62%	0.00%	0.00%

Table 19 Simulation Results – WELFARE WITH EQUIVALENT VARIATION

	Birth year	JAPAN	USA	CHINA	S. KOREA	INDIA	INDO NESIA	BANGL ADESH	PHILIPPI NES	THAIL AND	VIETN AM	BRAZI L	PERU	AUSTR ALIA	CANA DA	EUROPE	REST OF WORLD
Scenario 1	1930	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	1940	0.912	0.994	0.998	0.938	1.000	0.998	1.001	0.998	0.998	0.997	0.998	0.998	0.991	0.990	0.997	0.999
	1950	0.880	0.986	0.993	0.825	0.998	0.993	1.000	0.994	0.993	0.991	0.995	0.995	0.978	0.975	0.994	0.997
	1960	0.848	0.974	0.990	0.738	0.996	0.988	1.000	0.991	0.988	0.986	0.992	0.992	0.958	0.952	0.989	0.994
	1970	0.821	0.961	0.989	0.692	0.996	0.986	1.001	0.990	0.986	0.985	0.992	0.991	0.935	0.922	0.977	0.993
	1980	0.792	0.954	0.990	0.679	0.997	0.987	1.002	0.991	0.987	0.986	0.993	0.992	0.912	0.896	0.966	0.995
	1990	0.758	0.948	0.991	0.664	0.998	0.988	1.003	0.992	0.988	0.987	0.994	0.993	0.891	0.875	0.947	0.996
	2000	0.735	0.943	0.991	0.641	0.998	0.989	1.003	0.992	0.989	0.987	0.994	0.993	0.875	0.856	0.923	0.996
	2010	0.717	0.947	0.990	0.608	0.998	0.988	1.003	0.992	0.988	0.987	0.993	0.993	0.867	0.852	0.917	0.996
	2020	0.695	0.951	0.990	0.593	0.998	0.988	1.003	0.991	0.988	0.986	0.993	0.992	0.866	0.856	0.913	0.995
	2030	0.692	0.949	0.990	0.587	0.998	0.987	1.003	0.991	0.987	0.986	0.993	0.992	0.864	0.853	0.908	0.995
	2055	0.689	0.950	0.990	0.587	0.998	0.987	1.003	0.991	0.987	0.985	0.993	0.992	0.864	0.855	0.912	0.995
	2080	0.695	0.950	0.991	0.587	0.998	0.988	1.003	0.992	0.988	0.987	0.994	0.994	0.864	0.854	0.917	0.996
Scenario 2	1930	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	1940	0.912	0.994	0.998	0.938	1.000	0.998	1.001	0.998	0.998	0.997	0.998	0.998	0.991	0.990	0.997	0.999
	1950	0.880	0.986	0.993	0.825	0.998	0.993	1.000	0.994	0.993	0.991	0.995	0.995	0.978	0.975	0.994	0.997
	1960	0.848	0.974	0.990	0.738	0.996	0.988	1.000	0.991	0.988	0.986	0.992	0.992	0.958	0.952	0.989	0.994
	1970	0.822	0.961	0.989	0.692	0.996	0.986	1.001	0.990	0.986	0.985	0.992	0.991	0.935	0.922	0.977	0.993
	1980	0.793	0.954	0.990	0.678	0.997	0.987	1.002	0.991	0.987	0.986	0.993	0.992	0.912	0.896	0.966	0.995
	1990	0.762	0.948	0.991	0.663	0.998	0.988	1.003	0.992	0.988	0.987	0.994	0.993	0.891	0.875	0.947	0.996
	2000	0.746	0.943	0.991	0.638	0.998	0.989	1.003	0.992	0.989	0.987	0.994	0.993	0.875	0.856	0.923	0.996
	2010	0.739	0.947	0.990	0.601	0.998	0.988	1.003	0.992	0.988	0.987	0.993	0.993	0.867	0.852	0.917	0.996
	2020	0.736	0.951	0.990	0.578	0.998	0.988	1.003	0.991	0.988	0.986	0.993	0.992	0.865	0.856	0.912	0.995
	2030	0.758	0.949	0.990	0.561	0.998	0.987	1.003	0.991	0.987	0.986	0.993	0.992	0.864	0.853	0.908	0.995
	2055	0.832	0.949	0.990	0.508	0.998	0.987	1.003	0.991	0.987	0.985	0.993	0.992	0.863	0.855	0.911	0.995
	2080	0.900	0.950	0.992	0.351	0.998	0.989	1.003	0.993	0.989	0.988	0.995	0.994	0.862	0.853	0.916	0.996

Table 19 Simulation Results – WELFARE WITH EQUIVALENT VARIATION (continued)

	Birth year	JAPAN	USA	CHINA	S. KOREA	INDIA	INDO NESIA	BANGL ADESH	PHILIPPI NES	THAIL AND	VIETN AM	BRAZI L	PERU	AUSTR ALIA	CANA DA	EUROPE	REST OF WORLD
Scenario 3	1930	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	1940	0.912	0.994	0.998	0.938	1.000	0.998	1.001	0.998	0.998	0.997	0.998	0.998	0.991	0.990	0.997	0.999
	1950	0.880	0.986	0.993	0.825	0.998	0.993	1.000	0.994	0.993	0.991	0.995	0.995	0.978	0.975	0.994	0.997
	1960	0.848	0.974	0.990	0.738	0.996	0.988	1.000	0.991	0.988	0.986	0.992	0.992	0.958	0.952	0.989	0.994
	1970	0.822	0.961	0.989	0.692	0.996	0.986	1.001	0.990	0.986	0.985	0.992	0.991	0.935	0.922	0.977	0.993
	1980	0.793	0.954	0.990	0.678	0.997	0.987	1.002	0.991	0.987	0.986	0.993	0.992	0.912	0.896	0.966	0.995
	1990	0.761	0.948	0.991	0.663	0.998	0.988	1.003	0.992	0.988	0.987	0.994	0.993	0.891	0.875	0.947	0.996
	2000	0.743	0.943	0.991	0.639	0.998	0.989	1.003	0.992	0.989	0.987	0.994	0.993	0.875	0.856	0.923	0.996
	2010	0.731	0.947	0.990	0.603	0.998	0.988	1.003	0.992	0.988	0.987	0.993	0.993	0.867	0.852	0.917	0.996
	2020	0.719	0.951	0.990	0.585	0.998	0.988	1.003	0.991	0.988	0.986	0.993	0.992	0.865	0.856	0.912	0.995
	2030	0.726	0.949	0.990	0.577	0.998	0.987	1.003	0.991	0.987	0.986	0.993	0.992	0.864	0.853	0.908	0.995
	2055	0.740	0.950	0.990	0.573	0.998	0.987	1.003	0.991	0.987	0.985	0.993	0.992	0.864	0.855	0.912	0.995
	2080	0.746	0.950	0.991	0.572	0.998	0.988	1.003	0.993	0.988	0.987	0.994	0.994	0.863	0.853	0.917	0.996
Scenario 4	1930	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	1940	0.912	0.994	0.998	0.938	1.000	0.998	1.001	0.998	0.998	0.997	0.998	0.998	0.991	0.990	0.997	0.999
	1950	0.880	0.986	0.993	0.825	0.998	0.993	1.000	0.994	0.993	0.991	0.995	0.995	0.978	0.975	0.994	0.997
	1960	0.848	0.974	0.990	0.738	0.996	0.988	1.000	0.991	0.988	0.986	0.992	0.992	0.958	0.952	0.989	0.994
	1970	0.821	0.961	0.989	0.692	0.996	0.986	1.001	0.990	0.986	0.985	0.992	0.991	0.935	0.922	0.977	0.993
	1980	0.792	0.954	0.990	0.679	0.997	0.987	1.002	0.991	0.987	0.986	0.993	0.992	0.912	0.896	0.966	0.995
	1990	0.759	0.948	0.991	0.664	0.998	0.988	1.003	0.992	0.988	0.987	0.994	0.993	0.891	0.875	0.947	0.996
	2000	0.740	0.943	0.991	0.640	0.998	0.989	1.003	0.992	0.989	0.987	0.994	0.993	0.875	0.856	0.923	0.996
	2010	0.729	0.947	0.990	0.604	0.998	0.988	1.003	0.992	0.988	0.987	0.993	0.993	0.867	0.852	0.917	0.996
	2020	0.721	0.951	0.990	0.584	0.998	0.988	1.003	0.991	0.988	0.986	0.993	0.992	0.865	0.856	0.912	0.995
	2030	0.739	0.949	0.990	0.569	0.998	0.987	1.003	0.991	0.987	0.986	0.993	0.992	0.864	0.853	0.908	0.995
	2055	0.813	0.949	0.990	0.522	0.998	0.987	1.003	0.991	0.987	0.985	0.993	0.992	0.864	0.855	0.911	0.995
	2080	0.893	0.950	0.992	0.386	0.998	0.989	1.003	0.993	0.989	0.988	0.995	0.994	0.862	0.853	0.917	0.996

Table 19 Simulation Results – WELFARE WITH EQUIVALENT VARIATION (continued)

	Birth year	JAPAN	USA	CHINA	S. KOREA	INDIA	INDO NESIA	BANGL ADESH	PHILIPPI NES	THAIL AND	VIETN AM	BRAZI L	PERU	AUSTR ALIA	CANA DA	EUROPE	REST OF WORLD
Scenario 5	1930	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	1940	0.912	0.994	0.998	0.938	1.000	0.998	1.001	0.998	0.998	0.997	0.998	0.998	0.991	0.990	0.997	0.999
	1950	0.880	0.986	0.993	0.825	0.998	0.993	1.000	0.994	0.993	0.991	0.995	0.995	0.978	0.975	0.994	0.997
	1960	0.848	0.974	0.990	0.738	0.996	0.988	1.000	0.991	0.988	0.986	0.992	0.992	0.958	0.952	0.989	0.994
	1970	0.821	0.961	0.989	0.692	0.996	0.986	1.001	0.990	0.986	0.985	0.992	0.991	0.935	0.922	0.977	0.993
	1980	0.793	0.954	0.990	0.679	0.997	0.987	1.002	0.991	0.987	0.986	0.993	0.992	0.912	0.896	0.966	0.995
	1990	0.760	0.948	0.991	0.664	0.998	0.988	1.003	0.992	0.988	0.987	0.994	0.993	0.891	0.875	0.947	0.996
	2000	0.741	0.943	0.991	0.639	0.998	0.989	1.003	0.992	0.989	0.987	0.994	0.993	0.875	0.856	0.923	0.996
	2010	0.728	0.947	0.990	0.604	0.998	0.988	1.003	0.992	0.988	0.987	0.993	0.993	0.867	0.852	0.917	0.996
	2020	0.716	0.951	0.990	0.586	0.998	0.988	1.003	0.991	0.988	0.986	0.993	0.992	0.865	0.856	0.912	0.995
	2030	0.728	0.949	0.990	0.575	0.998	0.987	1.003	0.991	0.987	0.986	0.993	0.992	0.864	0.853	0.908	0.995
	2055	0.773	0.950	0.990	0.552	0.998	0.987	1.003	0.991	0.987	0.985	0.993	0.992	0.864	0.855	0.912	0.995
	2080	0.828	0.950	0.992	0.504	0.998	0.988	1.003	0.993	0.988	0.987	0.994	0.994	0.863	0.853	0.917	0.996
Scenario 6	1930	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	1940	0.897	0.994	0.998	0.938	1.000	0.998	1.001	0.998	0.998	0.997	0.998	0.998	0.991	0.990	0.997	0.999
	1950	0.846	0.986	0.994	0.825	0.998	0.993	1.000	0.994	0.993	0.992	0.995	0.995	0.978	0.976	0.995	0.997
	1960	0.797	0.974	0.990	0.738	0.996	0.988	1.000	0.991	0.988	0.987	0.992	0.992	0.958	0.952	0.989	0.994
	1970	0.756	0.961	0.989	0.692	0.996	0.986	1.001	0.990	0.986	0.985	0.992	0.991	0.935	0.922	0.977	0.993
	1980	0.714	0.953	0.990	0.678	0.997	0.987	1.002	0.991	0.987	0.986	0.993	0.992	0.912	0.896	0.966	0.995
	1990	0.669	0.948	0.991	0.664	0.998	0.988	1.003	0.992	0.988	0.987	0.994	0.993	0.891	0.875	0.947	0.996
	2000	0.643	0.943	0.991	0.641	0.998	0.989	1.003	0.992	0.989	0.987	0.994	0.993	0.875	0.856	0.923	0.996
	2010	0.627	0.946	0.990	0.608	0.998	0.988	1.003	0.992	0.988	0.986	0.993	0.993	0.866	0.852	0.917	0.996
	2020	0.608	0.950	0.990	0.593	0.998	0.987	1.003	0.991	0.987	0.986	0.993	0.992	0.865	0.856	0.912	0.995
	2030	0.605	0.949	0.990	0.587	0.998	0.987	1.003	0.991	0.987	0.986	0.993	0.992	0.864	0.853	0.908	0.995
	2055	0.603	0.950	0.990	0.587	0.998	0.987	1.003	0.991	0.987	0.985	0.993	0.992	0.864	0.855	0.912	0.995
	2080	0.608	0.950	0.991	0.587	0.998	0.988	1.003	0.992	0.988	0.987	0.994	0.993	0.864	0.854	0.917	0.996

Table 19 Simulation Results – WELFARE WITH EQUIVALENT VARIATION (continued)

	Birth year	JAPAN	USA	CHINA	S. KOREA	INDIA	INDO NESIA	BANGL ADESH	PHILIPPI NES	THAIL AND	VIETN AM	BRAZI L	PERU	AUSTR ALIA	CANA DA	EUROPE	REST OF WORLD
Scenario 7	1930	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	1940	0.889	0.994	0.998	0.938	1.000	0.998	1.001	0.998	0.998	0.997	0.998	0.998	0.991	0.990	0.997	0.999
	1950	0.827	0.986	0.994	0.825	0.998	0.993	1.000	0.994	0.993	0.992	0.995	0.995	0.978	0.976	0.995	0.997
	1960	0.770	0.974	0.990	0.738	0.996	0.988	1.000	0.991	0.988	0.987	0.992	0.992	0.958	0.952	0.989	0.994
	1970	0.720	0.961	0.989	0.692	0.996	0.986	1.001	0.990	0.986	0.985	0.992	0.991	0.935	0.922	0.977	0.993
	1980	0.671	0.953	0.990	0.678	0.997	0.987	1.002	0.991	0.987	0.986	0.993	0.992	0.912	0.896	0.965	0.995
	1990	0.621	0.948	0.991	0.664	0.998	0.988	1.003	0.992	0.988	0.987	0.994	0.993	0.891	0.875	0.946	0.996
	2000	0.593	0.943	0.991	0.640	0.998	0.989	1.003	0.992	0.989	0.987	0.994	0.993	0.874	0.856	0.922	0.996
	2010	0.579	0.946	0.990	0.608	0.998	0.988	1.003	0.991	0.988	0.986	0.993	0.993	0.866	0.851	0.916	0.996
	2020	0.561	0.950	0.990	0.593	0.998	0.987	1.003	0.991	0.987	0.986	0.993	0.992	0.865	0.856	0.912	0.995
	2030	0.559	0.949	0.990	0.587	0.998	0.987	1.003	0.991	0.987	0.986	0.993	0.992	0.864	0.853	0.908	0.995
	2055	0.557	0.949	0.989	0.587	0.998	0.987	1.003	0.991	0.987	0.985	0.993	0.992	0.864	0.855	0.912	0.995
	2080	0.561	0.950	0.991	0.587	0.998	0.988	1.003	0.992	0.988	0.987	0.994	0.993	0.864	0.853	0.917	0.996
Scenario 8	1930	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	1940	0.889	0.994	0.998	0.938	1.000	0.998	1.001	0.998	0.998	0.997	0.998	0.998	0.991	0.990	0.997	0.999
	1950	0.827	0.986	0.994	0.825	0.998	0.993	1.000	0.994	0.993	0.992	0.995	0.995	0.978	0.976	0.995	0.997
	1960	0.770	0.974	0.990	0.738	0.996	0.988	1.000	0.991	0.988	0.987	0.992	0.992	0.958	0.952	0.989	0.994
	1970	0.720	0.961	0.989	0.692	0.996	0.986	1.001	0.990	0.986	0.985	0.992	0.991	0.935	0.922	0.977	0.993
	1980	0.672	0.953	0.990	0.678	0.997	0.987	1.002	0.991	0.987	0.986	0.993	0.992	0.912	0.896	0.965	0.995
	1990	0.624	0.948	0.991	0.663	0.998	0.988	1.003	0.992	0.988	0.987	0.994	0.993	0.891	0.875	0.946	0.996
	2000	0.602	0.943	0.991	0.637	0.998	0.989	1.003	0.992	0.989	0.987	0.994	0.993	0.874	0.856	0.922	0.996
	2010	0.596	0.946	0.990	0.600	0.998	0.988	1.003	0.992	0.988	0.986	0.993	0.993	0.866	0.851	0.916	0.996
	2020	0.594	0.950	0.990	0.578	0.998	0.987	1.003	0.991	0.987	0.986	0.993	0.992	0.865	0.856	0.912	0.995
	2030	0.612	0.949	0.990	0.561	0.998	0.987	1.003	0.991	0.987	0.986	0.993	0.992	0.864	0.853	0.908	0.995
	2055	0.672	0.949	0.990	0.507	0.998	0.987	1.003	0.991	0.987	0.985	0.993	0.992	0.863	0.854	0.911	0.995
	2080	0.727	0.950	0.992	0.351	0.998	0.989	1.003	0.993	0.989	0.988	0.995	0.994	0.862	0.852	0.916	0.996