CAPITAL FUNDING – A FICTION

To begin with, we need to be clear about terminology. The term »capital-funded scheme« implies a security that does not really exist. It suggests that pensioners’ entitlements are covered by »capital« and are thus somehow not dependent on the willingness of »the young« to finance future pensions. According to this point of view, by contrast, pay-as-you-go pension schemes rest on the questionable promise that the economically active will »keep« the elderly. This perspective is illusory. All old-age pension schemes are necessarily based on a transfer of resources from the active to the inactive, with all the dependencies that arise from that. It is therefore much more accurate to talk of »financial market–dependent« rather than »capital-funded« schemes.

DEPENDENCE ON FINANCIAL MARKETS DOES NOT MAKE FINANCING EASIER

The proponents of a partial privatisation of pension schemes – for instance, the OECD, the European Commission, the World Bank, numerous governments and, of course, the financial sector – claim that public pension schemes are likely to falter due to an ageing population and that partial privatisation is therefore all but inevitable. Yet the assertion that society can no longer afford to pay pensions at previous levels, while private provision could, is implausible. Whether a society can afford a particular level of protection depends on whether it is able and willing to stump up the necessary resources, not on whether benefits are provided predominantly by a public or a private scheme. Key to (future) affordability is the level of (future) GDP.

MORE PILLARS, MORE SECURITY?

One frequently cited benefit of a mixture of pay-as-you-go financing and »capital funding« is risk diversification (for example, Rürup 2014; OECD 2013). While pay-as-you-go schemes depend on trends in employment and earned income, financial market returns are key to funded schemes. A mixture of the two components, the argument runs, would thus offer more security in old age because beneficiaries could gain from both favourable wage trends and high financial market returns, rather than putting all their eggs in one basket. But this confuses two considerations: the fact that in pay-as-you-go schemes contributions are not invested in financial markets does not mean that such schemes can only be funded from wages or earned income. Public pension schemes can also draw on other sources of revenue, which only require adequate tax funding. Taxes on wealth and other capital income would tap this source of financing without the need to invest any capital.

The (potential) fiscal basis of a pay-as-you-go pension scheme is GDP. Pensions are financed with income contributions from all sectors of the economy and from tax revenues. This broad funding base cannot be expanded by dividing pension payments organisationally between several pillars. As »capital-funded« pensions become increasingly important, however, so does dependence on financial market developments and thus the uncertainty of future pension levels. Although nominal value creation tends to develop...
more or less steadily, financial market returns fluctuate enormously.

ALL PENSION SYSTEMS ARE TRANSFER SYSTEMS

The proponents of funded pensions emphasise that people need to put money away to ensure their security in old age. This argument is based on the assumption that society as a whole can prefund future pension payments by saving now. On an individual basis, of course, this is perfectly true, albeit under conditions that individuals are powerless to influence; they prepare for the future by shifting income or consumption between different phases of life by saving up or going into debt. However, societies in the aggregate cannot do this because savers’ interest earnings and financial wealth are offset by debtors’ interest payments and financial liabilities. In macroeconomic terms, individuals’ allocation of income over the life course amounts to a transfer of resources between savers and debtors. Saving and borrowing thus always balance one another out. It is impossible to consume more than is produced, either now or in the future. Hence, in real terms, pensions cannot be »prefunded«.

Pension systems always have the same function: they provide pensioners with a monetary income, financed by those in gainful employment. In this way, claims on current value added are transferred from the economically active generation to the pensioner generation. To maintain the consumption capacity of those no longer in gainful employment, there has to be forgone consumption on the part of the »active« generations. The accumulation of assets during the period of gainful employment does nothing to change this because the latter is basically an attempt to secure a claim to a portion of future value creation.

In financial market-dependent systems, retirees redeem these claims by cashing out assets acquired during the employment phase. As a rule, the buyers are gainfully employed individuals who are acquiring such assets with the intention, for instance, of putting something aside for their pensions. Thus, such buyers are doing nothing other than transferring part of their income to those who are no longer in employment. Both old-age pension schemes are dependent on ensuring generations perpetuating the cycle, whether in the form of contributory and tax-based benefits or from the acquisition of assets and interest payments, rents and so on.

The main difference between »funded« and pay-as-you-go schemes lies not in their character as transfer systems, but rather in the different transfer mechanisms. In a pay-as-you-go public pension scheme, real burdens are allocated on the basis of democratic decision-making aimed at equalisation across society as a whole. By contrast, within financial market-dependent schemes, decision-making about burden allocation is left to market mechanisms. »Equalisation« here takes place by means of adjustments of asset prices and returns. Substantial shifts in the population age structure also change the ratio between savers and dissavers and result in adjustments in security prices, interest rates and so on. The more people simultaneously want to put money aside for old age, the more intense the downward pressure on interest rates; at the same time, asset prices are – at least initially – pushed higher. The more pronounced the shift to capital funding, the stronger the effect would be. The depreciation of assets that may plausibly occur when large birth cohorts enter retirement limits the scope for possible income transfers from the economically active to pensioners (»asset meltdown«). This demonstrates the ineradicable need for intergenerational »equalisation«.

FINANCIAL WEALTH VERSUS REAL CAPITAL

But doesn’t a larger capital stock in funded schemes promote future value creation and thus facilitate pension financing? In this context, it is crucial to distinguish between physical or real capital and financial capital.

Increased tangible asset formation does indeed help society to bear »the costs of ageing« more easily because it has a positive effect on future value creation. A higher real capital stock makes higher labour productivity possible; in other words, more goods and services can be produced per worker. The same applies with regard to higher employment and education and training levels, as well as technological advances. In this way society makes available a larger real volume of goods and services to be distributed between the generations.

Additional investments in physical capital are, however, totally different from accumulating financial wealth in pension funds. At best, increasing financial wealth inflates the financial value of real capital, but without expanding the capital itself. Asset price inflation – for example, of equity and security prices – makes neither pensions easier to finance nor the economy more productive. In fact, pushing »pension savings« hinders rather than helps to expand real capital. Apart from anything else, real investment depends on the level of effective demand, which forced saving, of course, depresses. Additional household savings entail, first and foremost, restricted household spending and thus falling corporate revenues. The most obvious corporate response in the face of a slump in sales, lower capacity utilisation and declining sales expectations is to cut real capital investment rather than expand it through debt financing, with correspondingly negative effects for the future real capital stock.

The notion that pensions become more secure the more money is invested in financial markets is thus a fallacy. This also applies to indices that infer the level of »pension wealth« in relation to GDP as a benchmark for pension system security (Mercer 2016; Allianz 2016). Even countries where policy-making has been captured by professed sceptics with regard to government borrowing should not lose sight of the fact that, generally speaking, a considerable proportion of »pension capital« comprises government bonds (OECD 2015: 193).

Ultimately, reality shows (see Figure 1) that there is no relation between the volume of wealth administered by pension funds and real capital formation. A comparison of real-capital intensity (measured in terms of net capital stock per worker in purchasing power parities) and pension wealth (measured in terms of the ratio between capital saved for
old age and GDP) shows clearly that there is no positive correlation between the two variables. The level of real-capital intensity clearly depends on factors other than the relative level of pension wealth.

**RISK DIVERSIFICATION BY INVESTING ABROAD?**

Another supposed benefit of »capital-funded« provision for old age is that it offers the option of investing abroad. As a result, the suggestion is, the financing base is not confined to the national economy, as in the case of pay-as-you-go schemes. By investing abroad (and its real-economy funding by corresponding export surpluses) the transfer process we described earlier can be augmented by cross-border transfers and demographic ageing tackled more effectively.

This does open up certain opportunities. Ultimately, however, although it does allow for risk to be spread more widely, it also leads to the emergence of new risks. The main question here concerns where investments should be made. As is well known, demographic ageing – based on different baseline scenarios – is developing in many regions, especially in the economically strongest ones. It makes sense to invest in countries where ageing is much less pronounced. However, there are limits to the ability of capital markets in developing and emerging countries to direct capital flows towards viable and profitable investment projects. Ignoring such limits entails the risk of unstable development, with excessive capital inflows giving rise to overheating and over-exuberance, perhaps leading, after a sudden stop, to panicked counter-movements and abrupt capital outflows. Developments of this kind were evident, for example, in the serious financial crisis in Southeast Asia in 1997/98, whose outcome was a prolonged economic crisis (Stiglitz 2002).

A strategy based on building up asset positions abroad over a period of decades for the express purpose of subsequently unwinding them over the course of decades is very risky. After all, the fate of wealth held abroad depends on economic and political factors beyond the control of national policymakers.

The example of Germany’s current account surpluses illustrates the economic costs that can go hand in hand with »international diversification«. The increase in Germany’s net international investment position since the introduction of the euro is about one-third below the value calculated on the basis of its current account surpluses (Joebges 2014). This can be traced back to exchange rate movements and price

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*Figure 1*

**Capital saved for old age as a percentage of GDP and real-capital intensity, 2015**

![Chart showing capital saved for old age as a percentage of GDP and real-capital intensity, 2015](chart.png)

*Note:* (1) Data do not cover the whole private pension system. (2) Data from 2014. (3) Data from 2013.

*Source:* OECD 2016; Capital intensity: AMECO-online, 2017; authors’ calculations.
fluctuations in securities. A strategy of investing abroad that results in around a one-third loss in asset values as a result of devaluation can hardly be recommended as a prudent contribution to economic security in old age.

In this context, we must not lose sight of the fact that the massive increase in Germany’s current account balances and the accompanying increase in foreign public debt has absolutely nothing to do with the further accumulation of foreign assets for future pension provisions. This is because the counterpart of an increase in foreign public debt is not a higher savings rate on the part of the household sector, but less willingness on the part of enterprises and the state to take on new debt (Flassbeck 2017).

A MORE REALISTIC EVALUATION OF CAPITAL FUNDING IS NEEDED

Schemes dependent on financial markets are by no means more robust in the face of demographic changes than pay-as-you-go ones. However, they will be much less able to ensure adequate retirement incomes across the board when demographic conditions deteriorate.

The decisive factor for the ongoing fundability of pension schemes is whether circumstances can be fashioned in such a way that, in future, extensive and high-quality labour market participation, a high level of education and a high real-capital stock enable correspondingly high value creation per capita. Forced pension saving does little to bring this about. The belief that »capital-funded« pension schemes will be able to provide for people’s retirement ultimately shifts attention away from genuinely promising strategies for tackling demographic changes that make sense both economically and socially.

Note

1 – Apart from the fact that sufficient financing of non-contributory benefits requires corresponding tax funding, on the grounds of fairness alone there is a strong argument, based on so-called »differential mortality« – in other words, the positive correlation between (longer) life expectancy and socio-economic status (measured in terms of income, wealth and so on) – for the at least partial financing of old-age pensions from tax revenues in generally contribution-based systems.

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