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INVESTMENT REGULATION OF INSURANCE COMPANIES AND PENSION FUNDS

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Quantitative regulations on domestic investment

Some quantitative restrictions on investment by pension funds and life insurance companies may be particularly highlighted among these, the following may be highlighted:

- They prevent appropriate account being taken of the duration of the liabilities;

- They make it difficult or impossible to apply appropriate immunisation or asset-liability management techniques for maturity matching;

- They can lead to portfolios below the efficiency frontier, hampering diversification and performance;

- They are inflexible and cannot be changed rapidly in response to changing conjunctural economic circumstances and structural shifts in securities markets;

- They may give incentives to asset managers to hold proportions of risky assets which fall well short of the limits, to avoid breaching them when markets perform well and prices rise;

- They may discourage competition in the asset management industry;

- They may lead to an inefficient allocation of capital, hinder the dynamic small firm sector (if limits on unquoted shares and venture capital) and may increase costs for employers, hence hindering job creation.

There are at the same time various arguments that can be used to justify quantitative domestic investment restrictions. One may distinguish between those that aim to correct market failures and those that have other goals in mind, such as reducing the government debt or constraining shareholder activism by institutional investors. Focusing on the former, the following may be mentioned:

- Fund managers may lack the necessary expertise or knowledge to engage on diversification strategies by themselves: quantitative regulations can then act as a guidance for fund managers until they become sufficiently experienced. The rationale for quantitative regulations would therefore diminish as fund managers become more experienced over time.

- The governance of pension funds and insurance companies may be inadequate: fund managers may not be sufficiently aware of their responsibilities under the investment mandate and may therefore engage in investment strategies that are not in the interest of the pension fund or the insurance company. However, the solution to this problem appears to be the introduction of governance regulations, rather than quantitative regulations per se.

- Legal and supervisory systems may lack the necessary strength to enforce the prudent person rule: hence, a second best may be to impose quantitative restrictions which can be more easily verified. Again, it may be argued that quantitative rules should only be a temporary solution as the necessary legal, judicial, and supervisory systems are put in place.

- Some quantitative rules may only have a beneficial impact on diversification: this is the case of self-investment limits and, to a certain extent, minimum diversification requirements (spread principle).

- Pension funds and insurance companies may offer some products to consumers (e.g. defined contribution pension funds) which have no financial or biometric guarantees, but governments may be required to bear ultimate responsibility for the performance of these products: to the extent that the government, and not the fund managers, bears the liability in case of bad performance, it may be understandable that it will want to control the operation of those responsible for fund management through quantitative regulations.

Except self-investment and quantitative spread requirements, which have in most cases only a beneficial diversification objective, the justification for other forms of quantitative restrictions seems to be that alternative regulatory and supervisory systems, which do not rely on quantitative regulatory methods, cannot be easily implemented. In such cases, the potentially damaging effect of portfolio restrictions on diversification and solvency may be offset by the danger posed by institutions that operate under an inadequate oversight framework.

However, a more general and long term justification for quantitative regulations may be made in the case of mandatory defined contribution plans, whether these are managed by pension funds or insurance companies. Already, in three OECD countries (Hungary, Mexico, and Poland) pension funds are likely to become an important if not the main source of retirement income for its population. To the extent that individuals can choose their portfolio, it may be argued that governments, through their fiduciary duty to ensure adequacy of income in old-age, may need to correct opportunities for abuse of this duty. Individuals, for example, may choose pension funds offering them high risk portfolios in expectation that the government will bail them out in old-age.

Quantitative restrictions on foreign investment

Of all the forms of quantitative restrictions, limits on foreign investment can be one of the most damaging for the diversification principle. Diversification into foreign assets can be an effective way to avoid correlations of domestic assets and possibly even to aim for higher rates of return. The case for quantitative restrictions on foreign investment is in fact based mainly on macroeconomic arguments, such as the consequences of capital flow volatility for macroeconomic stability. Some developing countries also justify such restrictions on the need to encourage the development of domestic capital markets.

Implications for pension funds and life insurance companies

A number of key differences exist between pension funds and insurance companies. The main differences are related to the nature of their liabilities. A second group of differences arises from their source of capital, while the third group of differences arises from the environment in which they operate.

The main justifications for subjecting pension funds and life insurance companies to different investment regulations arise only in situations where some form of insurance or guarantees are offered. Therefore, to the extent that these institutions administer only products that offer no specific insurance (e.g. defined contribution pension plans), there is no a priori reason for treating investments by pension funds and insurance companies differently. The role of these institutions is then limited to ensuring an adequate combination of risk and return, and they are not exposed to any other liabilities. Equally, the capital base of an insurance company, or the sponsoring employer in the case of pension funds, only play a role to the extent that the products offered have some form of insurance against biometric or/and financial risks.

In the case of such insurance products (e.g. defined benefit pension funds and term policies and annuities sold by life insurance companies) an asymmetric treatment of pension funds and life insurance companies may be justified. There are three main reasons related to the nature of the liabilities of these institutions which may explain why life insurance companies may better withstand an onerous quantitative approach to investment regulation than pension funds:

- The liabilities of insurance companies are fixed in nominal terms (or grow with inflation, if inflation indexed products are sold) while those of pension funds are linked explicitly or implicitly with average earnings: to the extent that the goal of these institutions is to meet their liabilities, life insurance companies may be able to best do so by matching the duration of a bond portfolio with its liabilities. On the other hand, pension funds may need to invest in certain asset categories, such as equity, which may be a better match for average earnings than other assets, such as bonds. Hence, regulations that limit investment in equities may affect more adversely pension funds than life insurance companies;

- Life insurance companies are better able to control the duration of their liabilities and reduce some risks (such as longevity risk) by varying the mix of products sold, such as annuities and term policies. Pension funds, on the other hand, offer only one type of product (defined benefit pension plans are equivalent to deferred annuities) and therefore rely fully on their investments to reduce these risks;

- The liabilities of life insurance companies are exposed to some risks that are not present for pension funds to the same degree, such as liquidity risk (for policy loans and guaranteed early surrender values) and expense risk (that policies will be surrendered before selling costs have been recouped). Hence, life insurance companies may have a greater preference for low-yielding, capital certain assets than pension funds.

It must be emphasised, however, that these are not justifications for imposing more onerous quantitative investment restrictions on life insurance companies than on pension funds. Rather, they are reasons as to why the potentially adverse impact on diversification may be greater on pension funds.

We may, however, highlight four reasons as to why, in the case of products which offer some form of insurance or guarantee, insurance companies should be subject to more restrictive investment regulations. The first two of these arguments are related to the capital base, while the last two are related to the competitive conditions in which these institutions operate:

- Pension funds have no explicit capital base, unlike an insurer, who uses it as a cushion against errors, and also non-guaranteed bonuses on variable policies. Pension funds, however, have a link to a non-financial firm, whose own capital effectively provides the backup for a defined benefit fund. Hence, the level of protection of the products offered by pension funds seems greater than those of life insurance companies, and the former may therefore engage on riskier investment strategies.

- Any excess returns on defined benefit pension funds only accrue to the sponsor, while any excess returns on investments against technical provisions profit the life insurance company directly. Hence, insurance companies face higher risk-taking incentives, which may pose a threat to the solvency of these institutions. These incentives may therefore need to be controlled through tighter investment regulations.

- Insurance companies sell their products in a competitive environment, while pension funds are typically monopoly providers of pensions to workers in a given firm. Life insurers are arguably more likely to make errors in premia due to competitive pressures

than are pension funds in their contributions. These pressures create further incentives for risk-taking which may need to be controlled through investment regulations. On the other hand, in the case of products that offer no guarantees, such as defined contribution pension plans, pension funds are likely to operate in as competitive environment as insurance companies.

- Pension funds, as non-profit making institutions profiting from tax privileges are more subject to social pressure on their investments than are insurance companies. Hence, they require a more flexible regulatory approach to investment. On the other hand, in the case of products that offer no guarantees, individual choice plays an equally powerful force in investment choices by insurance companies as by pension funds.

Quantitative regulations of pension funds and insurance companies in the OECD

In OECD countries pension funds are generally subject to a less strict investment regulatory regime than life insurance companies. Of the fifteen countries which impose known restrictions on equity investments, seven have higher ceilings for pension funds, five have equal ceilings for both type of institutions, and only three have higher ceilings for insurance companies. Interestingly, two of these last three countries are those where pension funds are subject to similar regulations as insurance companies (Finland and Germany). The other country where pension funds are subject to a lower ceiling on investment in equity than life insurance companies is Mexico. This country, however, has a pension system that relies fully on mandatory defined contribution pension funds, which may explain the government's apprehension towards riskier investments by these institutions.

The contrast is even greater in the case of investment in corporate bonds. Countries such as Belgium, Denmark, Finland, Japan or Luxembourg which restrict significantly investment by life insurance companies, impose no limits on pension fund investment in these instruments.

Pension funds and insurance companies also differ in the extent of self-investment. While such practice is typically forbidden for life insurance companies, some OECD countries impose relatively lax limits for pension fund investment in employer-related assets. In addition to those countries that permit the book reserve method for funding pension liabilities, self-investment by pension funds is subject to a 30% ceiling in Finland and Switzerland. Other OECD countries impose much lower limits.

On the other hand, in the case of foreign investment the treatment of pension funds is not that different from that of life insurance companies. There are some countries where pension funds are normally subject to more lenient regulations. For example, in Japan insurance companies can only invest up to 30% of their portfolio in foreign assets, while pension funds face no investment restrictions. On the other hand, in Mexico insurance companies can invest up to 49% of their portfolio in foreign assets, while pension funds are not permitted to invest abroad. In general, however, countries that impose strict limits on investment by pension funds also subject life insurance companies to similar regulations. This appears to show that foreign investment regulations pay more attention to other arguments than exclusively the nature of the liabilities of pension funds and life insurance companies.

In terms of the impact of quantitative regulations on investment allocation and rates of return, some evidence appear to support the main hypothesis raised here: firstly, that pension funds suffer more in performance terms from quantitative restrictions than life insurance companies. Secondly, that in countries where pension funds and life insurance companies are subject to prudent person principles and there are few quantitative investment rules investment portfolios of pension funds and life insurance companies have performed better than in countries where strict quantitative rules are in place.

ANNEX: SURVEY OF INVESTMENT REGULATION OF INSURANCE COMPANIES AND PENSION FUNDS IN OECD COUNTRIES

Pension funds

The information collected concerns all forms of quantitative portfolio restrictions applied to pension funds in OECD countries at different legal levels (law, regulation, normative, etc). Pension funds are independent legal entities that are established and managed mainly for the purpose of providing retirement and other old-age benefits (such as disability, health benefits) to the members of a pension plan. Pension funds as defined in this form exist in all countries except **Greece**, the **Slovak Republic**, and **Turkey**. Further information about these countries is needed.

Pension funds may be self-administered or externally managed, when one or more of the functions carried out by a pension fund (e.g. asset management, benefit payment, account management) are outsourced to another company. Self-administrated pension funds, however, do not exist in all OECD countries (they do not exist in **Czech Republic**, **Portugal**, **Spain**).

The investment regulations that are applied to self-administered pension funds may differ from those applied to externally managed pension funds. For example, under a deposit administration contract (a form of external asset management by insurance companies) in the **United States** the pension assets are subject to insurance regulation.

In some countries, self-administrated pension funds may themselves underwrite the liability to guarantee investment performance or a certain level of benefits. Such entities are very similar to mutual associations and related entities subject to insurance regulation. This is the case, for example, of the *pensionskassen* in **Germany**, which although they fit the definition of a pension fund, are treated for regulatory and supervisory purposes as insurance companies. They are, nonetheless, included in the table below.

Two other classifications of pension funds are relevant from the perspective of investment regulation. The first is between closed and open pension funds. The main difference is that a closed pension funds supports a retirement plan restricted to specific participants (e.g. employees from a specific company, industry, or government agency), while an open pension fund supports retirement plans that do not have membership restrictions.

The second classification is between mandatory and voluntary pension funds. Compulsion may apply to both employees and employers. In some countries, for example, employers are required to provide pension plans funded via a closed pension fund or an insurance contract (e.g. **Switzerland**), while in others they can also channel their contributions through an open pension fund (e.g. **Australia**). Employees are required to contribute to these pension plans. In other countries, employees are required to contribute only to open pension funds, managed by financial intermediaries (e.g. **Mexico** and **Poland**), or to either closed or open funds (e.g. **Hungary**).

In most countries, closed and open pension funds are subject to the same investment regulations. However, in **Hungary** mandatory pension funds are subject to more stringent regulations than the voluntary funds. In **Mexico**, different regulatory regimes exist for closed and open funds, but little information is available on the closed funds. Finally, in **Poland**, the open pension funds operate in the mandatory pension system, while the closed (employee) pension funds collect only voluntary contributions. Therefore, the investment regulation of the latter contains fewer restrictions.

Table 2 contains a summarised description of all the quantitative restrictions applied to pension fund investment portfolios in OECD countries. Some form of quantitative regulation is applied in all member countries. By far the most common ones are regulations intended to limit conflicts of interest between plan members and pension fund managers. In all countries except **Japan**, pension funds are subject to self-investment limits, the ceiling ranging from 30% in **Finland** and **Switzerland** to 0% in **Denmark**.

Many OECD countries also limit investment in a single issue or in securities from the same issuer. The limit is usually set at around 10% of the fund, though in some countries it is higher (e.g. **Italy** at 15%).

About half of OECD countries where pension funds exist also place limits by asset type (see Table 1). The most common are limits in equities and foreign securities. Equity limits are applied by sixteen of the twenty-seven OECD countries with pension funds. These limits range from 65% in **Belgium** to 0% in **Mexico**. Table 1 lists the countries and limits in equities. Some countries also place tighter restrictions on investment in unquoted shares. This is the case in **Belgium**, **France**, and **Finland**.

Eleven OECD countries place no limits on investment in equities. These countries are **Australia**, **Canada**, **Ireland**, **Italy**, **Japan**, **Luxembourg**, the **Netherlands**, **New Zealand**, **Spain**, the **United Kingdom**, and the **United States**.

Countries that limit investment in equities tend also to restrict investment in other asset categories, such as property. The ceilings range from 50% in **Switzerland** to 0% for **Hungarian** and **Mexican** mandatory pension funds. In general, the limit for direct investment in property is lower than that for equities. The only two exceptions are **Finland** and **Switzerland**, where pension funds are allowed to invest a greater percentage of their asset in real estate than in stocks.

Various countries also limit loans by pension funds, such as mortgage loans (**Austria**, **Belgium**, **Czech Republic**, **France**, **Finland**, **Hungary**, **Mexico**, **Poland**, and **Portugal**). The limit ranges from 50% in **Finland** to 0% in the countries with open funds (**Czech Republic**, **Hungary**, **Mexico**, and **Poland**).

Investment limits in other domestic assets such as bonds and bank deposits are much less extended. Limits on corporate and mortgage bonds are imposed only in **Hungary**, **Mexico**, and **Portugal**. A few countries also place limits on investment in liquid assets, such as deposits (**Italy**, **Portugal**, and **Spain**).

While no OECD countries impose ceiling in investment in government bonds, four countries apply floors. In **Austria** pension funds are required to invest at least 35% of their assets in mortgage bonds, government bonds, and Euro denominated debentures. **French** pension funds must invest a minimum of 50% in EU government bonds. In **Denmark**, pension funds must invest a minimum of 60% of their portfolio in domestic debt. Finally, in **Mexico**, pension funds must invest at least 51% of the funds' assets in inflation-linked or inflation protected securities and at least 65% in securities that either have a maturity shorter than 183 days or have floating rate notes whose rate is revised in less than 183 days.

Some countries also impose limits on ownership concentration, that is on the portion of a company's capital that pension funds can own. The ceiling ranges from 30% in **Canada** to 5% in **Spain** and **Sweden**.

Finally, some countries restrict investment in foreign securities, either through direct ceilings or via currency matching rules. The latter are present in **Denmark**, **Finland**, **Germany**, where pension funds are required to cover at least 80% of their liabilities with assets in the same currency and **Italy**, where the minimum level is 33%.

Direct limits on foreign securities exist in some countries, ranging from 65% in **Belgium** to 0% in **Mexico**. Most countries that limit investment in OECD countries impose even tighter limits on investment in securities from non-OECD countries. In fact, only a few countries permit investment in non-OECD securities, including **Australia** (no limit), **Canada** (20% limit), **Hungary** (9% for mandatory pension funds, 6% for voluntary pension funds, investment in non-OECD equity not permitted), **Ireland**, **Italy** (5%), **Netherlands**, **New Zealand**, **Norway**, the **United Kingdom**, and the **United States**.

Insurance companies

In most OECD countries, the investment regulations of insurance companies do not extend to the investment of their capital base. A distinction between the treatment of the *assets representing the technical provisions* which are the basis for satisfying the claims of the insured and the *assets covering the other liabilities* which serve to satisfy the other creditors is, e.g., reported by all **EU** Member countries, **Japan**, **Mexico** and **Switzerland**. In almost all OECD Member countries (with the exception of **Iceland, Italy, Japan, Norway** and **Turkey**), there is no regulation regarding free assets. The **EU** Member countries expressly committed themselves not to draw up any such regulation.

The principles of *diversification* (the proportion of the total investment in particular classes of investments) spread (the proportion of total investments in one particular class of investments) and *liquidity* (with the exception of **Korea**) are common in almost all OECD Member countries.

Ceilings may be set on admitted investments, by type of investment and in percentage terms rather than in absolute value, so as to reduce the risk of default or of liquidity shortage. Hence, it is common to find maxima on unquoted securities, on low quality corporate bonds and on certain classes of foreign investments.

The **EU** Insurance Directives, instead of harmonising investment rules, drew up a list of ceilings intended to ensure diversification and an adequate spread of the investments representing the technical provisions. The list is exhaustive in order to give maximum flexibility to the EU Member countries as well as to the insurance companies. Moreover, in certain countries, such as **United Kingdom, Ireland** and **Australia**, the insurance companies can invest above the maxima, but they cannot count these assets which are held above this level as admissible assets representing technical provisions.

Countries following the approach of quantitative requirements and having fixed certain percentages (the above ceilings) for the individual types of investments, in general allow the same kind of investments but with different limits. Assets representing technical provisions may be invested in:

- *bonds* (in all Member countries; no minimum floors reported; maximum percentages between 2 per cent as in **Turkey** and 5 per cent (**Poland**) up to 100 per cent);
- *shares* (all Member countries; no minimum floor reported; maximum percentages between 25 per cent and 100 per cent);
- *mortgages* (not allowed in **Turkey**) ,
- *real estate* (all Member countries; percentages of 10 per cent as in the **Netherlands** to 100 per cent);
- *loans* (all Member countries except **Poland);**

- *advances against policies in life insurance* (except for **Japan** and the **United Kingdom**);and

- *cash* (all Member countries except **Mexico**).

Investments in *derivatives* are not permitted in France, Hungary, Luxembourg, Norway, Poland and Turkey, and for hedging purposes exclusively in Belgium, Denmark, Germany, Iceland, Korea, Mexico, the Netherlands, Norway and United Kingdom.

Ceilings or restrictions for *investments abroad* (representing technical provisions) exist in **Belgium, Germany, Iceland, Italy, Japan, Korea, Luxembourg, Norway, Poland, Portugal, Spain, Sweden** and **United Kingdom** which range from 5 per cent (**Poland**) to 100 per cent (**Germany, Italy**, **Luxembourg and Norway).** Besides, **Australia, Czech Republic, Hungary, Mexico** and **Turkey** are not permitting investments abroad for cover of technical provisions.

A majority of OECD countries have no specific rules regarding accepted reinsurance business. In some countries accepted reinsurance is taken into account for the calculation of assets corresponding to technical provisions and technical provisions may be represented in assets by debts on ceding companies (**Denmark, France, Italy, Spain, United Kingdom** and **United States**). In other countries like **Ireland, Switzerland** and **Portugal** this is not allowed.

Table 1: Limit on OECD pension fund investment in selected domestic asset categories

Country	*Equity*	*Real Estate*	*Bonds*	*Investment funds*	*Loans*	*Bank deposits*
Australia	No limit	No limit	No limit	No limit	No limit	No limit
Austria	50	20	No limit	No limit	10	No limit
Belgium	65 (quoted) 30 (unquoted)	40*	No limit (corporate)	30	40* (mortgage)	No limit
Canada	No limit	5	No limit	No limit	No limit	No limit
Czech Republic	25	No limit	No limit	25	0	No limit
Denmark	40	40*		40*		
Finland	30 (quoted) 5 (unquoted)	40	No limit	No limit	50	No limit
France	65 (quoted) 0.5 (unquoted)	0	No limit		10	
Germany	20-25	15-25				
Hungary[1]	50 (MPF) 60 (VPF)	0 (MPF) 10 (VPF)	40 (VPF, corporate) 50 (MPF, corporate) 10 (mortgage)	50	0 (MPF) 5 (VPF)	No limit
Iceland	50 (quoted) 10 (unquoted)					
Ireland	No limit	No limit	No limit	No limit	No limit	No limit
Italy	No limit	No limit	No limit	20	No limit	20
Japan	No limit	No limit	No limit	No limit	No limit	No limit
Korea	40	15				
Luxembourg	No limit	No limit	No limit	No limit	No limit	No limit
Mexico	0	0	35 (corporate) 10 (mortgage)	0	0	No limit
Netherlands	No limit	No limit	No limit	No limit	No limit	No limit
New Zealand	No limit	No limit	No limit	No limit	No limit	No limit
Norway	35	?				
Poland[2] OPF	40 (in quoted shares) 10 (on secondary market)	0	No limit	10 (NIFs) 10 (close-ended) 15 (open-ended)	Equal to investment in the shares of the borrower	No limit
EPF		0	No limit	No limit	Equal to investment in the shares of the borrower	No limit
Portugal	50	45	60 (corporate)	No limit	25 (mortgage) 5 (other)	30
Spain	No limit (quoted) 10 (unquoted)	No limit	No limit	No limit	10 (if no mortgage guarantee)	15
Sweden	60	No limit				
Switzerland	30	50				
United Kingdom	No limit	No limit	No limit	No limit	No limit	No limit
United States	No limit	No limit	No limit	No limit	No limit	No limit

Note: There are no pension funds in Greece, the Slovak Republic, and Turkey. * stands for joint limits.
(1) MPF stands for mandatory pension fund; VPF for voluntary pension fund
(2) OPF stands for open pension fund, EPF for employee pension funds (closed funds); NIF stands for national investment funds.

Table 2: Regulation of pension fund assets in OECD countries

	Investment regulation					
	Minimum diversification requirements	**Self-investment / Conflicts of interest**	**Other quantitative rules**	**Ownership concentration limits**	**Currency matching**	**Direct limits on foreign investments**
Australia	None	Limited to 10%, being reduced to 5% in 2000/1 Loans or financial assistance to members not permitted	None	None	None	None
Austria*		Permitted, but requires the explicit approval of the Supervisory Board and limited to 10%.	At least 35% of the assets must be invested in mortgage bonds, government bonds, and debentures denominated in Euro. Limits include: 50% in shares, 20% in property, and 10% in loans yielding a market rate of interest.		None	Limited to 50% for non-Euro countries. Sub-limit of 2% for foreign property.
Belgium	Maximum 10% of the fund may be invested in stocks, bonds and notes of the same issuer. Maximum 20% in one single property.	Limited to 15%.	Portfolio investment limited to: - 65% in equities - 40% in real estate - 30% in non-quoted companies - 30% in investment funds - 10% in deposits			Localisation requirement: all assets must be located in Belgium or EC countries, but may invested in securities issued by institutions authorised by a supervisory body similar to the Belgian Banking and Financial Commission. Direct limits: 5% in foreign investment funds, 65% in OECD equities. Investment in non-OECD equities not permitted.

	Investment regulation					
	Minimum diversification requirements	**Self-investment / Conflicts of interest**	**Other quantitative rules**	**Ownership concentration limits**	**Currency matching**	**Direct limits on foreign investments**
Canada	Yes, maximum 10% may be invested in stocks, bonds and notes of one company or person	Permitted, but limited to 10% of the fund's assets	Investment in real estate is limited to 5% of the fund's assets.	Funds may own maximum 30% of voting shares of one company	None	Maximum 20% of the fund
Czech Republic	Investment in securities from the same issuer limited to 10% of the fund's assets Bank deposit in one bank is limited to 10% The value of one piece of real estate or one movable assets can not exceed the 5% of the fund assets.	Investment in shares of other pension funds is prohibited	Investment in shares and participation certificates of unit trusts is limited to 25% Mortgage and other loans are not permitted	Pension funds assets can not include more than 20% of the nominal value of shares issued by the same company	None	Foreign investment is permitted only in case of the securities traded in OECD markets
Denmark		Not permitted.	"High-risk assets" (domestic and foreign shares and unlisted securities) limited to 40%. Property and investment-trust holdings limited to 40%. Minimum of 60% in domestic debt.		Minimum 80%. For EU currencies up to 50% of liabilities can be covered by assets denominated in Euro.	Limited to 20%.
Finland	Yes, assets should be diversified and decentralised within the diversified groups	Permitted, but limited to 30%	Investment is limited to - 30% in quoted shares, - 5% in unquoted shares, - 50% in mortgage loans, - 40% in real estate	No information available	Minimum 80%	Maximum 5% can be invested in assets denominated in foreign currency from non-EEA states. Up to 20% of funds may be invested in assets in EU states
France**		Limited to 33%	Minimum of 50% in EU			

	Investment regulation					
	Minimum diversification requirements	**Self-investment / Conflicts of interest**	**Other quantitative rules**	**Ownership concentration limits**	**Currency matching**	**Direct limits on foreign investments**
			government bonds.			
Germany*	Yes, deposits with a single credit institution are limited to 2%	Permitted, but limited to 10%	Investment limited to - 20-25% in equities, - 15-25% in property	No information available	Yes, 80%, in case the premium reserve stock concerns maximum 5% and the remaining restricted assets maximum 20% of the obligations in a certain foreign currency	Overall limit of 20% on foreign assets. Sub-limits: - 6% in non-EU equity. - 6% in non-EU bonds - 30% in EU equity - 25% in EU property
Greece	Not regulated					
Hungary	Funds may invest maximum 10% of its assets in securities issued by the same issuer (except for state bonds) Overall value of securities issued by an	Funds may not have ownership in business organisations in which the founders of the fund, the employers of the fund members, the donors or service	Investment is limited to: - 60% (MPF), 70% (VPF) in portfolio category II[1] (except for state bonds), - 30% in portfolio category III - 50% (MPF), 60% (VPF) in quoted shares, - 40% (MPF), 50% (VPF) in	Funds shall not directly own more than 10% of the registered capital or equity of a business organisation for more than a year	None	VPF: limited to 20% of the fund's assets, and within investments made abroad the ratio of investments made in non-OECD countries shall not exceed 30% MPF: limited to 30% of the fund's assets, and within

[1] Portfolio category I: amount fixed on a deposit account at a lending institution for max. one year, Hungarian state bond, if booked as current asset, securities for which the Hungarian state undertakes cash surety, if booked as current asset
Portfolio category II: amount fixed on a deposit account at a lending institution for more than one year, Hungarian state bond if booked as invested assets, securities for which the Hungarian state undertakes cash surety, if booked as invested assets, state bonds issued in OECD member states, distributed and introduced on recognised securities market in Hungary, bonds issued by business organisations registered in Hungary and covered by bank guarantee, bonds issued by lending institutions registered in Hungary, bonds issued by international financial organisations, distributed and introduced on recognised securities market in Hungary, stocks listed in Category A on the Budapest Stock Exchange, mortgage bonds issued by mortgage banks registered in Hungary
Portfolio category III.: bonds issued by business organisations registered in Hungary, bonds issued by Hungarian local governments, bonds issued in OECD member states, distributed and introduced on recognised securities market in Hungary, bonds issued abroad, and distributed in Hungary, stocks listed in Category B on the Budapest Stock Exchange, stocks issued in Hungary and introduced on recognised securities market, stocks issued in OECD member states and introduced on recognised securities market, investment units issued by investment funds registered abroad and introduced on recognised Hungarian securities market, real estate, investment units issued by real estate investment fund registered in Hungary, futures, options

	Investment regulation					
	Minimum diversification requirements	**Self-investment / Conflicts of interest**	**Other quantitative rules**	**Ownership concentration limits**	**Currency matching**	**Direct limits on foreign investments**
	organisation belonging to the same banking group cannot exceed 20% of the invested fund assets (MPF)	suppliers of the fund own more than 10% of the stakes	bonds, - 50% in investment units, - 10% in mortgage bonds, - 10% in real estate investment unit - 10% in real estate (only VPF) Direct investment in real estate is prohibited (MPF) Loan for fund members is limited to 5% (only VPF)	Funds may own maximum 10% of the securities issued by the same issuer (MPF)		investments made abroad the ratio of investments made in non-OECD countries shall not exceed 30%. Investment in bonds issued by non-OECD countries is limited to 5% Investment in shares issued in non-OECD countries is prohibited.
Iceland	Maximum 10% can be invested in same party or related parties	10% self-investment limit	Limit of 50% in equity.	Funds may not own more than 15% of the shares of an individual firm or 25% of shares in a particular equity fund.	None	Only OECD securities, up to a maximum of 50% for quoted, 10% for unquoted securities. Foreign currency exposures of more than 40% must be hedged. Foreign investment prohibited for nurses', farmers', and seamen's funds.
Ireland	None, but any of issue of securities can only represent up to a maximum of 10% of pension fund assets for purposes of proving solvency.	No limit, but company assets can only represent up to a maximum of 5% of assets for purposes of proving solvency. Disclosure of self-investment if in excess of 5% of total assets.	None	None	None	None

	Investment regulation					
	Minimum diversification requirements	**Self-investment / Conflicts of interest**	**Other quantitative rules**	**Ownership concentration limits**	**Currency matching**	**Direct limits on foreign investments**
Italy	Yes, debt and equity securities issued by one issuer is limited to 15% of the fund	Permitted, but limited to 20% in case of one company, and 30% if more companies making contributions to the fund	Yes, the limits in percentages of the fund's assets: -Liquidity: 20%, -Shares of closed-end investment funds: 20%	Holding of shares of closed-end investment funds is limited to 25% of the closed-end fund's assets	Yes, the fund will be obliged to invest minimum 1/3 of the assets in currency in which the benefits will be denominated	Yes, debt and equity securities of OECD countries not traded in regulated markets are limited to 50% of fund assets, Debt and equity securities of non-OECD countries traded in regulated markets are limited to 5% Debt and equity securities of non-OECD countries traded in non-regulated market are prohibited
Japan	EPF[2]: No information available	EPF: Permitted	EPF: None	EPF: No information available	EPF: None	EPF: None
	TQP[3]: not regulated					
Korea* **	Loans to one business group are limited to 5% of the fund (3% for one person). Bonds and shares issued by one business group or company is limited to 5 % of the fund	N/A	Limits: - 40% in quoted shares; - unquoted shares not in excess of equity; - 15% in real estate - 1% in any small business		None	Limited to 10% of assets.
Luxembourg	None	None	None	None	None	10% limit on securities issued by non-residents.

2 EPF-employee pension fund

3 TQP-tax qualified plan

	Investment regulation					
	Minimum diversification requirements	**Self-investment / Conflicts of interest**	**Other quantitative rules**	**Ownership concentration limits**	**Currency matching**	**Direct limits on foreign investments**
Mexico	Up to 10% of the amount outstanding of any one issue or the debt issued by any single issuer. Up to 15% can be invested in debt issued by related entities.	Up to 5% (or under special authorisation 10%) can be invested in securities issued by entities with which the fund manager has any kind of financial relationship.	At least 51% of the funds' assets must be invested in inflation-linked or inflation protected securities. At least 65% of the funds' assets must be invested in securities that either have a maturity shorter than 183 days or have floating rate notes whose rate is revised in less than 183 days. Issues must have been awarded two highest ratings by authorised rating companies (three highest in the case of maturities shorter than one year). The rest of the portfolio may be invested in the following categories: - 35% in corporate bonds, - 10% in instruments issued by financial institutions		N/A	Investment in foreign securities is not permitted by law. Pension funds can invest up to 10% of their assets in foreign currency denominated securities issued by the federal government or the Central Bank (e.g. Brady bonds).
Netherlands	Yes, diversification by countries, sectors and currencies is required	Limited to 5% of the fund assets until the level of technical provision, in case of exceeding assets, it can be 10% maximum	No further restrictions	No information available	None	None
New Zealand						None

	Investment regulation					
	Minimum diversification requirements	**Self-investment / Conflicts of interest**	**Other quantitative rules**	**Ownership concentration limits**	**Currency matching**	**Direct limits on foreign investments**
Norway		Loans to the employer are permitted only if the loans are secured by pledge, and must not exceed 20% of the total assets. The fund is not permitted to own shares or equity in the company for which the fund is founded.	35% limit in equities			None
Poland	No more than 10 % of the fund's assets shall be invested in a single kind of securities No more than 5% of the fund's assets shall be deposited with a single bank or with two or more affiliated banks No more than 2% of the fund's assets shall be invested in investment certificates of a single closed-end investment fund or a single hybrid investment fund	EPF shall invest no more than 5 % of its assets in shares or other securities no admitted to public trading, no more than 12.5% in securities admitted at least partially (no less than 7.5%) to public trading of shareholders or shareholders affiliates of the employee OPF[4] may not be invested in securities issued by	Investment of the assets of OPF is limited to: - 40% in quoted stocks, - 10% in secondary stock market, - 10% in NIFs, - 10% in National Bank of Poland papaers, - 15% in municipality bonds, - 10% in close-ended investment funds, - 15% in open-ended investment funds EPF: None	None	None	5% of EPF and OPF 's assets can be invested in foreign securities

[4] Open pension funds (mandatory)

	Investment regulation					
	Minimum diversification requirements	**Self-investment / Conflicts of interest**	**Other quantitative rules**	**Ownership concentration limits**	**Currency matching**	**Direct limits on foreign investments**
	Total value of the fund's investment in all securities of a single issuer or of two or more affiliated issuers shall not exceed 5 % of the fund's assets	a pension fund company or its shareholders, controlled, controlling or associated entities				
Portugal			Main limits: -60% in commercial paper and bonds - 45% direct investment in real estate - 50% in equities - 30% in short-term deposits 25% on shares quoted in OECD stock exchanges.			Limited to 20%.
Slovak Republic	Not regulated					
Spain	Investment in a single entity is limited to 10% of the fund's assets.	Limited to 10%.	90% of assets must be invested in organised, officially recognised markets; Deposits and other money market assets must be 1-15%.	Funds may not hold more than 5% of the market value of the securities issued by a single entity.	None	None for OECD countries.
Sweden	Investment in a single company is limited to 10%	Limited to 10%	Investment in shares is limited to 60%	Funds may not hold more than 5% of the voting power of a single company		Limited to 5-10% depending on the funds and the assets concerned

	Investment regulation					
	Minimum diversification requirements	**Self-investment / Conflicts of interest**	**Other quantitative rules**	**Ownership concentration limits**	**Currency matching**	**Direct limits on foreign investments**
Switzerland	Investment in debt instruments of a single entity (except government bonds, banks and insurance companies) is limited to 10% (5% for foreign assets). Investment in equity of a single company is limited to 10% (5% for foreign assets).	Limited to 30%.	Investment limited to: - 30% in equities, - 50% in real estate, - 75% in mortgages Investments in unlisted equities are not authorised. Investment in derivatives for hedging purposes only.			There is an overall limit in foreign currency investments of 30% and the following sub-limits: - 30% in equities, - 20% in foreign currency bonds (30% for CHF bonds). There are also aggregate limits for domestic and foreign equity (50%), bonds (30%), and real estate and equity (70%).
Turkey	Not regulated					
United Kingdom	Maximum 10% invested in any one trust, and 25% in unit trusts run by any one manager.	Yes, self-investment is limited to 5%.	No quantitative portfolio restrictions	No information available	None	None
United States	General requirement for diversification	Limited to 10% for DB plans	None	No information available	No explicit rule	None

Table 3: Domestic Limits on investment representing technical provisions – life insurance companies

Country	***Bonds***		***Shares***	***Mortgage***	***Real Estate***	***Loans***	***Cash***	***Derivatives***	***Unit Trust***
	Corporate Bonds	Government Bonds							
Australia	100	100	100	100	100	100	100	100	100
Belgium	10	100	10	100	100	5	100	5	100
Czech Republic	NA	NA	10	20	25	N	NA	N	10
Denmark	40	100	40	N	N	Y	Y	N	40
Finland	50	100	50	40	40	Y	3	N	N
France	65	100	65	10	40	10	N	N	NA
Germany	50	50	30	50	25	50	N	N	30
Hungary	NA	NA	NA	NA	NA	NA	NA	N	N
Iceland	Y	N	Y	Y	Y	Y	Y	N	N
Italy	Y	Y	Y	Y	Y	Y	Y	N	Y
Japan	10	100	30	N	20	10	N	N	N
Korea	100	100	30	100	15	100	100	2	100
Luxembourg	40	100	25	N	40	10	20	N	25
Mexico	60	100	30	5	25	5	NA	30	NA
Netherlands	N	N	N	N	10	8	3	N	N
Norway	30	100	35	30	100	1	100	NA	30
Poland	5	100	30	5	25	N	100	N	30
Portugal	60	60	50	25	45	25	20	N	20
Spain	100	100	100	45	45	5	3	NA	Y
Sweden	50	100	25	25	25	N	3	N	N
Switzerland	N	N	30	N	N	N			
Turkey	2	N	25	N	15	5	3	N	10
United Kingdom	N	N	N	N	N	N	3	N	N
United States									
EC	VAR	VAR	VAR	N	N	VAR	3	NA	VAR

Table 4: Quantitative Regulation of Investment of Representing Technical Provisions:

Life Insurance Companies in OECD countries

Country	Investment regulation					
	Limits by asset category (diversification and liquidity principle)	**Minimum diversification requirement (spread principle)**	**Localisation**	**Currency Matching**	**Maturity Matching**	**Restrictions to foreign Investments**
Australia	None	None	None	None	None	
Austria	None	None	None	None	None	
Belgium	Y	-max. 5 % by same issuer, except 10% of state loans -no limits on state loans of zone A	EU or under certain conditions OECD	Y	N	Y (for inv. in countries not belonging to zone A acc. to Directive 89/647/EEC)
Canada	None					
Czech Republic	- real estate: max. 25% - mortgage :max. 20% - shares: max. 10% - deposits: max.20% in one bank	- deposits: max. 15% of the capital stock of a single bank - stocks by same issuer: 3% of each reserve or 10% of the basic capital of the issuer	Y (Czech Republic)	-	-	N
Denmark	EU rules	EU rules	EU	Y	Y	N
Finland	EU rules	EU rules	Y	Y	Y	N
France	EU rules	EU rules	EU rules	Y	Y	N
Germany	- no special limits with cash deposits at and loans to credit institutions - no special limits with mortgage loans - 30% fully paid-up shares admitted for official trading - 30% shares of separate bonds - no special limits with government loans, loans on policies, real property - 25% shares of separate property accounts - 5% other investments not permitted as above		EU	EU	N	5% of the Deckungsstock and 20% of the other restricted assets may be located in non- EEA states
Greece						

Hungary	domestic securities: max. 10% in life,60% in non-life, real estate: 20 % in life, 60% in non-life, mortgage loans: 70% in life, 10% in non-life	investments in other enterprises are limited	Hungary	Y	N	ins. prov. and solvency capital may only be invested in H
Iceland	- advances against policies: max.100% - shares, bonds, debt securities issued by municipal community : max. 50 % - shares, bonds, debt securities dealt in on a regulated market in EEA state or issued by institution under supervision: max.40% - land, building, shares in co.that mainly invest in land, other tangible assets:max. 40% - shares not dealt in on regulated markets: max.10% - debt securities and debts securities with other security:max. 8% - debts securities and debts without special security: max. 5% - cash : 3%	securities issued by EEA state: max. 100%; deposits in banks located in EEA state : max. 100%	EU (exemptions possible)	80%	Y	assets covering technical prov. for risks in the EEA shall be invested in the EEA (exemption poss.)
Ireland						
Italy	EU rules	EU rules	EU (non-EEA on request)	Y	N	Y (for technical prov.)
Japan	in case of maturity-refund-policies: - stocks: max. 30% - real estate :max. 20% - assets in foreign currency: max. 30% - bonds, loans, lending securities : max. 10% in case of other policies: -stocks: max. 30% - real estate: max. 20% - assets in foreign currency: max. 30% - bonds, loans, lending securities: max. 10%	- holding of debentures and stocks of one issuer and giving loans secured on such debentures, giving loans and lending securities to one person, deposits with one person, placing assets in trust of one person: aggregate limit of max. 10% when held concurrently - giving loans and lending securities to one pers.: max. 3%	Y (for foreign ins. co.'s in JAP)	N	N	max. 30 % of assets in foreign currency in either an account for other than maturity-refund-policies or one for maturity-refund-policies
Korea	- stocks: max. 30 % - real estate: max. 15% - overseas investments: max. 10%	- loan and investment to one pers.: max. 3% - loan and investment to same affiliated co.: max. 5%	NA	N	N	Y (max. 10% of total assets)
Luxembourg	Y	Y	Y	Y	N	N

Mexico	- federal bonds : 100% - bonds of credit institutions: 60% - others : 30 % - adequate liquidity achieved by investment in short term securities(in case of prov. for claims outstanding 100%, for prov. for unearned premiums 50%, for math. Reserve 30%)		MEX	Y	Y	max. 49 % (100% in case of foreign subsidiary)
Netherlands	EU rules	EU rules	EU	80%	only as an implicit requirement of suitability	N (except rules for localisation/currency matching as in table 8)
New Zealand						
Norway	-shares and other holdings: max. 35% -interest-bearing assets: max. 30%	NL: 4% in securities issued by single issuer, 2% participation in single property; L: 3% in securities issued by single issuer, 4% participation in single property	Y	Y	Y	Y (OECD area and Saudi Arabia, to ensure prudent capital management)
Poland	Y	Y	Poland	Y	Y	obligation to invest exclusively in :- treasury bills - treasury bonds -other securities issued or guaranteed by state - municipal bonds -bonds issued by other entities -shares - bank deposits -unit trust -the share of foreign inv. may not exceed 5%
Portugal						
Spain	EU rules	Y	Y	Y	Y	Y

Sweden	- bank deposits,bonds, debt securities: 75 % -whereof in public limited co.: 50% -shares issued by Swedish co.: 25% -land,buildings, debts with security: 25% - debts by nat.pers.: 10% - cash: 3% -shares, debt securities not dealt on in regulated market: 10%	-land,building: 5% in same piece - shares, bonds, debt securities from same undertaking or loans granted to same borrower: 5%	EU	80%	only as an implicit requirement of suitability	N (except localisation and currency matching)
Switzerland						
Turkey	Y Liquidity: in life ins. 3% of math. Reserves	participation in one co. may not exceed 10% of networth in shares and 20% of that of a group	Turkey (in life ins.;except premiums earned abroad)	In life ins.; liabilities in foreign currency should have an exchange risk between 50 - 150 %	NR	in life, technical prov. have to be deposited in T (except premiums earned abroad)
United Kingdom						
United States	Y, with respect to individual investments,industry concentrations,dates of maturity; often laws non-admit low-grade investment in excess of 5-10% of admitted assets - recognition or preference to investments in stocks and bonds which are traded on US or other qualified exchange,	Per issuer limitations of 3-5% of admitted assets for other than US-government backed or guaranteed investments; RBC considerations may penalize over-concentrations in subsidiaries and affiliates. Limitation may apply to all investments of any kind issued, assumed, accepted, insured or guaranteed by a single person.		Foreign denominated investments may be limited to 5-10% of admitted assets.Limited exceptions exist for high quality inv.	Asset-adequacy testing is required for life portfolios. Separate account products which guarantee or pay results based on an index may require maturity matching.	
EU	The home Member State shall require to invest no more than: - 10% in shares, other securities treated as shares and debt securities which are not dealt in on a regulated market, - 5 % in unsecured loans, including 1 % for any single unsecured loan, other than loans granted to credit institutions, ins. co.'s and investment co.'s established in a Member State, - 3% in cash;	- 10 % in any one piece of land or building or a number of pieces of land or buildings close enough to each other to be considered as one investment, - 5 % in shares and other negotiable securities treated as shares, bonds, debt securities and other money and capital market instruments from the same undertaking, or in loans granted to	in respect of risks situated within the EU, the assets must be localised within the EU	The home Member State shall require every ins. co. to cover the technical prov. in respect to its entire business by matching assets (acc. to	N	Y

	the Member State shall give more restrictive treatment to - any loan unaccompanied by a bank guaranty, a guaranty issued by an ins. co., or mortgage or any other security, - UCITS (mutual funds) not co-ordinated within the meaning of directive 85/611/EEC, -securities which are not dealt in on a regulated market, - bonds, debts and other money and capital market instruments not issued by States, local or regional authorities or undertakings belonging to zone A as defined in directive 89/647/EEC	the same borrower, taken together, the loans being loans other than those granted to a State, regional or local authority or to an int. Organisation of which one or more Member States are members; this limit may be raised to 10% if the co. does not invest more than 40% in loans or securities of issuing bodies and borrowers in each of which it invests more than 5% of its assets		an annex to the directives)		