

Unit link in Sweden

by **Fredrik Jejdling, Magnus Kjellberg and Carl Westerstad,**
Stockholm School of Economics

The launch in 1990 of unit link, or unit-linked insurance, as a consequence of the removal of legislative barriers was a milestone for the Swedish life assurance industry. Due to rigid regulations, the Swedish assurance industry had for long been static, deprived of change and new products.

The paper is organised as follows. Firstly, an introduction to unit link is presented. Secondly, an outline of the Swedish life assurance market with specific emphasis on the unit link market is conducted. Thirdly, our expectations for the future of unit link are presented. Finally, conclusions are provided.

1 Unit link – a new sort of life assurance

1.1 Introduction to unit link

Thanks to new legislation taking effect in 1990, unit link was launched on the Swedish insurance market.¹ Legally unit link is an insurance², but is best described as a long-term saving product. Whether or not it is categorised as a saving or insurance product may be dependent on the portion of insurance and saving. Unit link, a flexible product which with a low degree of insurance-related risk is similar to traditional fund investments. However, with a larger fraction of insurance, it has characteristics similar to those of traditional life assurance. Unit link may thus be a substitute to bank products, such as deposits, tax-

favoured long-term saving (*allemanssparande*), equity and bond funds as well as insurance products with a high portion of saving. Due to the difficulty in categorising the product, the implication is that unit link blurs the boundaries between the insurance and the banking industry.

There are two fundamental reasons for the reframing of the insurance industry. Firstly, unit link is as mentioned a broad insurance product whose construction *per se* extends the boundaries of the potential market compared to traditional life assurance products. Secondly, new players appear more evidently on the insurance market. The interest of banks in the insurance market is due to the fact that pension saving is predicted to increase considerably in combination with the fact that life

assurance has tax advantages, which is beneficial to the end client. Thus, insurance saving as an investment alternative grows.

In a conventional life assurance, the underwriter undertakes, in case of future occurrence of event, to pay a given amount or periodical amounts in accordance with the assurance contract. The underwriter solely decides how the premium is invested.³ Regarding unit link, the underwriter only commits himself to paying an amount corresponding to the value of units in certain security funds. The funds are selected by the assured. This fundamental difference implies a number of consequences. Regarding the unit link, the underwriter does not guarantee any value growth for the insurance. Instead, the financial risk is passed on to the insured. Therefore, the unit link company does not have to enclose any assumptions about excess interest return. Any excess interest return from the management of the insured value cannot occur, which also makes clauses for the bonus reserve unnecessary.⁴ The rationale is that the assets – the fund units – are owned by the insured himself and not jointly owned by the assured. The discrepancy between unit link and life assurance also creates difference in incentive for the insurer. In the case of life assurance, the assured is guaranteed a 4 % return. The insurer's goal therefore consists in achieving this guaranteed return whereas the incentives of exceeding the guarantee might be low. The informational asymmetry between insurer and the assured regarding the management of the invested capital may consequently be that the insured value is not efficiently invested. Such *moral hazard* is impossible to occur in the case of unit link, since the value of the savings is linked to each saver's individual investment choice and as this value can easily be derived from the unit price of the chosen funds.

1.2 Reasons for the advent of the unit link market

The obvious reason for the advent of unit link is that legislative barriers were pulled down. The rationale for the act enabling unit link was to provide a more flexible capital insurance product and more efficient competition. Moreover, unit link was entitled same tax advantages, relative to other saving alternatives, as was the case for traditional life assurance. By this government aimed at creating an incentive for an increased degree of personal pension saving. Another element was the increased internationalisation of the insurance market. Swedish assurance companies were entitled the same opportunities to offer unit link as foreign competitors when the latter got access to the Swedish insurance market.

Demographic change is an important factor awakening the demand for unit link. People tend to live longer and longer. By year 2040, the share of pensioners is estimated to increase by 50 % in Sweden.⁵ This implies that it seems difficult to maintain current standard of living with the pension system of today, in which the work force to a major extent finances the pensions of the elder generation. As a counteraction to the erosion of the government-funded pension system, people tend to increase its private pension saving.

Another reason for the rise of demand for unit link is the changed Swedish economic environment in the 1990's. During the 1980's, the Swedish economy suffered from high inflation and a highly distortive tax system leading to a negative net return for traditional life assurance. This of course discouraged saving reflected by the fact that the personal saving rate⁶ occasionally was negative.⁷ The upturn in saving, i.e. a decreased consumption, had a positive impact on saving products. According to Leif Passmark, former CEO of Skandia Link⁸, unit link received a disproportionately large share of the increase.

What also affected the rise of the new sort of insurance is that the insurance market traditionally has been deprived of innovative products. In light of historical regulation of the insurance industry, this has caused a relatively slow-paced market with few changes and new products. A new way of long-term saving therefore attracted attention and interest.

1.3 Characteristics of unit link

Compared to conventional life assurance unit link offers a greater range of investment flexibility. The flexibility consists in being able to personally determine how to pension-save. Through the unit link the consumer has the opportunity to invest in various markets and industries without being too heavily exposed to risk and without the costs that an individual investor would have to bear. The flexibility, or the opportunity to personally balance the mix between return and risk, reflects the improved conditions and at the same time enjoying tax advantages.

Unit link offers an informational advantage from the insured's point of view. The insured can monitor the value development of the units. The implication is that the insured more actively can determine whether the size of the insurance is adequate considering what the insurance is intended for. Thus, unit link is perceived as a product easy to understand.

The value of the fund units does not necessarily have to increase having in mind the turbulence in financial markets in October 1987. A similar event is not unlikely to occur again. However, unit link insured have, compared to many other investors, an opportunity of constructing a more diversified investment portfolio – comprising equity, bonds, government-guaranteed papers etc. – and may also be more diversified geographically. Such portfolio diversification decreases the risk of value destruction in case of renewed turmoil. On the one hand, unit link offer considerably

more advantageous average return in the long run than conventional life assurance. On the other hand, the lowest-yielding unit link funds may be inferior to conventional life assurance. This implies that those who easily incorporate new information regarding financial markets gain, on average, from unit link.

Savers, in particular small ones, are generally risk avert and tend to be deterred from sudden movements in financial markets. By investing on a regular basis in unit funds, the risk that the insured invests at a point in time when prices are abnormally high diminishes. In other words, price variations are smoothed. When prices fall, the insured buys cheaper, *ceteris paribus*, and when prices rise, she buys at a more expensive price. The consequence is that a fixed payment purchases a fluctuating amount of units every month proportionally to price changes of the units. Such a strategy implies that the investor benefits from financial market fluctuations by spreading payments evenly over the cycles of financial markets.

1.4 Characteristics of unit link customers

Unit link clients can *simplistically* be categorised into three groups.⁹

A first category may be characterised as being less risk avert and with a long time horizon (*vis-à-vis* the other two categories mentioned below). In addition, this category tends to consist of relatively high net-worth individuals and/or be of lower age. This category tends to be relatively knowledgeable about economic trends and financial markets. Being less risk avert, these individuals may invest in branch-specific funds. Another preference of investment may be country-specific funds that invest in small and medium-sized companies.

A second category may have a balanced mix of return and volatility. This category generally prefers global funds. These global

funds may combine equity and bonds or focusing solely on equity. These savers have a tendency to be closer to retirement compared to the above mentioned category.

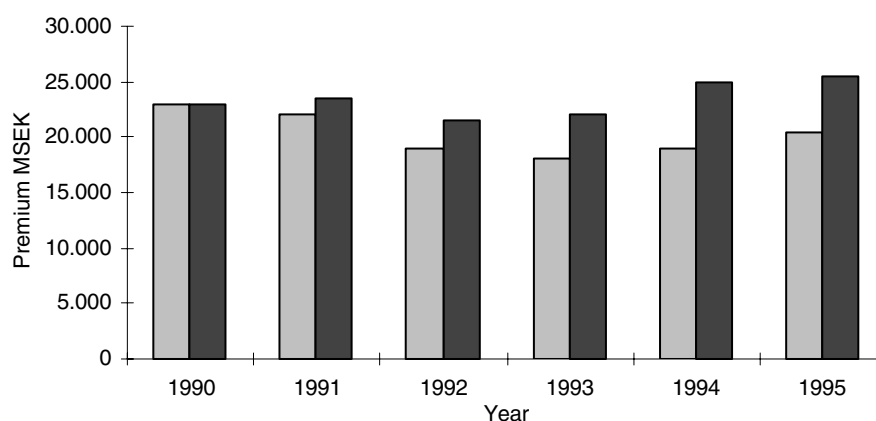
The final category is mainly distinguished by being low-risk. Their investment is similar to that of a conventional life assurance. This category will retire in a future not too distant which explains their aversion to expose their capital to excessive risk. In general, they turn away from currency risk. As a result, Swedish bonds or treasury bills are preferred. However, another option this category faces is to benefit from letting the insurer determine where the future looks most prosperous by investing in global bond funds. If so, the insurer is allowed to actively trade both bonds and currencies.

2 The unit link market 1990-1996

2.1 The life assurance market and unit link

As mentioned earlier, the change in legislation enabled individuals to invest their pension savings in unit funds via insurance companies and banks. When the legislative change was announced, there was an immediate growth in unit link savings.

Figure 1. Total Life Assurance Market



Source: Annual reports

□ Traditional life assurance ■ Unit link

Figure 1, showing the total life assurance market in Sweden measured as total premium income per year, indicates that in 1991 the premium income for unit link companies was MSEK 1,775. This represents 7.5 per cent of the total life assurance market that year. High annual average growth of 32 % endured until 1995 when there was a marginal decline.

The immediate growth in unit link products caused a decrease in the traditional life assurance market (see Figure 1). The annual premium incomes for this type of insurance continued to decrease until 1993 when they stabilised at a level of MSEK 18,100. In 1994 the market increased and reached in 1995 a level of MSEK 20,400. The implication is that unit link stole market share from traditional life assurance whereas it only marginally enlarged the aggregate market.

2.1 Market changes

The introduction of unit link changed the structure of the banking and insurance industry quite sharply. The two sectors had historically been separated. As a customer, one could either save in a bank (on a savings account or in different funds), or one could pay regular premiums- or one time payments- to insur-

ance companies. The insurers in turn invested in secure government bonds. Unit link provides the intersection between these two sectors, which has redefined the market. Due to the unit link introduction, the banking and insurance sectors have converged. Two different financial intermediaries now offer essentially the same product.

In the beginning, most of the companies offering unit link insurances positioned themselves as pension assurance companies giving the customer the right to invest the money as she pleased. As the competition sharpened among the companies, they started differentiating their product. The unit link products emanating from the banking sector emphasised the bankers' knowledge and experience of fund management. The banks also had a distribution advantage with the large number of bank offices closely situated to the customers. The insurance companies, on the other hand, focused on the assurance part, including survivorship and whole life protection.

Initially, SkandiaLink had a unique concept of offering funds from both internal as well as external fund managers such as Morgan Stanley and Alfred Berg. Trygg-Hansa has followed this concept by introducing exter-

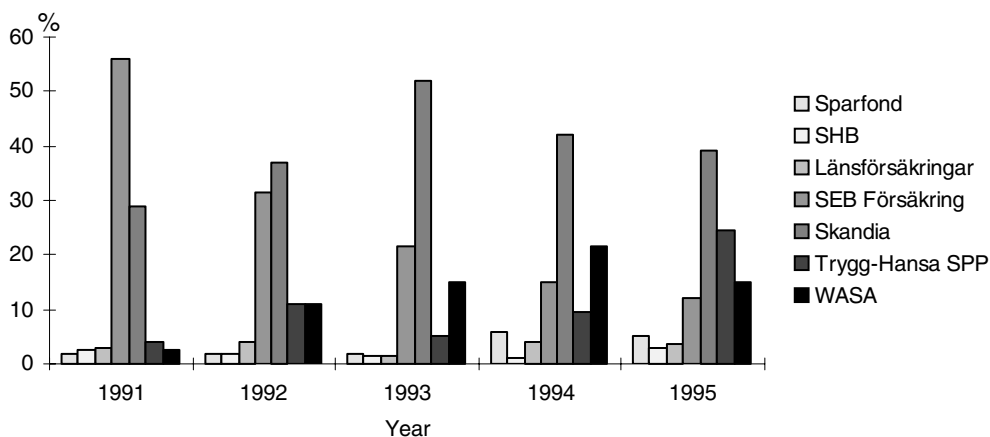
nally managed funds in 1994. The funds of remaining players are to a large extent managed within their own group.

Since the introduction of unit link in Sweden, there has been an ample presence of foreign unit link companies. They actually represented a premium income of MSEK 10,150¹⁰ in 1994 or approximately 65- 70 % of the unit link market. The reason for this large market share was the Swedish taxation authorities' limited resources for monitoring Swedish unit link savings in foreign companies. As a result, savers were able to withhold pension holdings from being taxed in Sweden. As from 1995 the tax authorities' ability to monitor Swedish pension savings abroad improved. Since foreign pension savings are taxed the same way as Swedish, the incentive to save abroad drastically declined. In 1995 the premium income for foreign companies was MSEK 2,000.

2.2 Intra-market competition - domestic players¹¹

Initially, the market was highly pooled in that SEB Fondförsäkring and Skandia Link enjoyed approximately 85 % of the market. Subsequently, the dominating position of SEB

Figure 2. Market Share of Domestic Unit Link Companies



Source: Försäkringsförbundet

Table 1. Financial figures

		SEB Fond	Skandia Link	TH Fri Plac	WASA Fond
1994	Operating profit	18,426	-9,804	-25,000	-90,968
	Invested capital	156,651	188,263	60,000	128,841
	Profitability	11,7	-	-	-
1995	Operating profit	22,361	23,659	-59,307	-85,686
	Invested Capital	175,073	198,454	70,718	130,025
	Profitability	12,4	11,9	-	-

Note: Profit measures are in KSEK and profitability in %

Fondförsäkring eroded. Diminished market share has been captured by Trygg-Hansa and Wasa reflecting the fact that today four competitors enjoy market share in excess of 10 % (see Figure 2).

As the market is maturing there is an increased rivalry among the companies. The natural way of reacting in this situation is to cut fees, which is the focus of the companies today. The two largest competitors of today are Skandia Link and Trygg-Hansa. One explanation for their high market share is the result of their competitive advantage in offering a rich variety of investment opportunities externally managed by local experts.

Figure 1 shows a large premium growth, but does not reflect profitability. In order to measure whether the high growth has been accompanied by sound profitability, a return on invested capital has been calculated.¹² The results in Table 1 are surprising. The large growth in volume is not accompanied by profits. In 1994, three out of the four largest companies showed a negative result. For 1995, the results are somewhat more positive. At least three of the companies are in the black. In terms of this profitability measure, SEB Fond seems to be most profitable.

The profitability measures should be interpreted with caution. Firstly, the measures are static in that the study solely consists of two fiscal years. Secondly, the unit link

companies are all part of a group. Consequently, profits, assets and liabilities may deviate from the *de facto* figures due to internal pricing and the like.

3 The future of the Swedish unit link market

3.1 Growing amount of private savings

In most European Union member states, in general, and in Sweden, in particular, a reform of the welfare state is high on the political agenda. Issues such as population ageing, high structural unemployment, high national debt and budget deficits have all contributed to the fact that the social programme in Sweden can no longer be maintained as it is. Hence in the future the public social programme is not likely to be as extensive and safe-guarding as has been the case in Sweden ever since World War II. As a consequence, the cut-down on the public pension schemes is likely to be significant since it accounts for a substantial part of the public expenses. At the same time, primarily due to population ageing, the ratio of pension expenditure to GDP is anticipated to grow substantially in Sweden after the turn of the century. By the year 2030 the pension expenditure to GDP is estimated to be in the range 10 to 15 %.¹³

Due to the above, there will be a pressure on individuals in the future to manage their own pension savings to a larger extent. Given such a scenario, the market for private pension savings will grow significantly and thus affect the prospects for unit link savings as well. There are already clear signs of such a trend. In Sweden the personal saving rate has undergone a structural increase. The average personal saving rate between 1992-1996 equals 7.7 %, which can be compared with a historical long-term average (1971-1991) of 1.7 %.¹⁴ The personal saving rate is subject to substantial fluctuations due to the activity of the economy and thereby it does not necessarily mean that this is a structural change. However the fact that the personal saving rate during the historical long-term period never exceeded 5 % implies that a structural increase *de facto* has taken place.

This trend of a growing amount of savings will inevitably lead to a strong growth in the pension savings market and, other things being equal, be prosperous for the Swedish unit link market as well.

3.2 Uncertainty of future regulations

Statutory regulations on the capital market in general and the life assurance market in particular have played an important role for the development of the Swedish unit link market, and will continue to be critical in the future. As has been concluded before, in Sweden tax reductions, exclusively entitled life assurances including unit link, have favoured savers' decision, *ceteris paribus*, to prefer these saving alternatives to others. Historically, these tax advantages have frequently been subject to altered conditions. One example is the reduction of the yearly amount of tax deductible premiums paid in to life assurance. As from January 1 1995, this amount was halved to currently SEK 18,100.

Continuously altered conditions imposed

by government, especially when resulting in a lower degree of benefits, increase the uncertainty of the advantages of saving through life assurance and thereby the value later to be paid out to the insured. Since one of the main objectives of pension saving is to reduce future uncertainty, continuously modified rules make savers more reluctant, *ceteris paribus*, to choose unit link. This is especially true since the amount saved is locked in and hence cannot be withdrawn before the time when the pension is paid out.¹⁵ This belief is supported by Leif Passmark who stresses that continuously modified statutory rules regarding unit link is the main pitfall of a future prosperous Swedish unit link market.

3.3 Enhanced competition

3.3.1 Enhanced rivalry among competitors

Ever since legislative barriers were removed enabling the launch of unit link, the Swedish market has been accessible to foreign unit link companies (see section 2.1). It is mainly the foreign divisions of Swedish assurance companies that have captured to a large extent this share and not companies originating from a foreign EU nation or elsewhere in the world. There are three plausible reasons for the absence of large foreign unit link companies in the Swedish market. Firstly, the Swedish market might be perceived too small for being worth exploring. Secondly, foreign companies have large comparative disadvantages to Swedish banks and assurance companies. They do not have the face-to-face contact with the customers through numerous branches as is the case with the Swedish banks. Similarly, they do not have a large established Swedish customer base stemming from other insurance types such as property insurance *et cetera*. Thirdly, a Swedish saver might also be more reluctant to invest in a

foreign unit link product due to the undesirable currency risk associated with assets denoted in foreign currencies.

An interesting question is whether a more homogenous EU market in the future will make the Swedish unit link market more attractive to foreign competitors. If Sweden joins the EMU then the current disadvantage of currency risk would no longer be present. However, the lack of proximity and of established relation to Swedish unit link savers would still be a significant competitive disadvantage for foreign players. The easiest way to approach the Swedish savers would probably be through the acquisition of an established Swedish competitor. As an alternative, the fast development of information technology might improve the prospects for foreign actors to interact with Swedish unit link savers.

In the event of a growing amount of new foreign entries the competition of Swedish unit link market would inevitably sharpen. Even though such a development has not yet taken place, margins in the Swedish unit link market are already declining.¹⁶ This is due to an enhanced domestic competition. The customers of today have a clearer perception of the unit link market which has become more transparent due to for example increased marketing activities and frequent comparisons in media between the unit link competitors. As a result, fees have generally declined and the differences in fees have narrowed between the competitors.

As the unit link companies become larger they might try to transfer this loss of fee revenues stemming from the customers to the fund companies. With a growing amount of managed savings and hence an improved purchasing power they may in turn try to require lower fees from the funds. However, since the unit link division and fund company often belong to the same group such changes in internal pricing will not affect the aggregated result which inevitably will decrease.

3.3.2 Product substitutes

During the first years of the Swedish unit link market there were few, if any, product substitutes which offered the saver the same advantages. Traditional life assurance provided a low degree of investment flexibility whereas other sorts of saving products did not offer the same advantageous tax reductions. Today, however, merging substitutes such as the IPS (*Individuellt PensionsSparande*) concept and less restricted rules for traditional life assurances create major threats for the future of unit link.

The IPS concept, initiated by the Swedish government in 1994, is to a large extent similar to unit link insurance. As opposed to the unit link concept, IPS does not provide any degree of assurance and hence is solely a saving product. Furthermore the maximum amount that an individual is allowed to invest per annum is restricted; currently ranging between SEK 18,100-36,200.¹⁷ Savers enjoy the opportunity to replace a saving institute with another. Moreover, IPS as opposed to unit link does not require the saver to have the whole amount of pension funds invested in mutual funds; the saver is allowed to deposit the pension reserves in a special saving account with favourable interest rate.

So far IPS has not taken any significant amount of market shares from the unit link market.¹⁸ It has to do with the fact that IPS, due to the relative low amount one is allowed to invest per annum, cannot capture the most profitable customers of unit link – the high-income customers. In a majority of EU nations there is no upper bound on how much one is allowed to invest in saving concepts equivalent to the Swedish IPS. Even though IPS is not a significant threat to unit link in Sweden of today this might be the case in the future. It will be difficult for the Swedish government to justify different rules for saving products relative to the rest of the EU. Hence, if the restriction on how much that can be saved

within IPS is abandoned in Sweden, IPS is likely to capture significant market shares from the unit link market.

Traditional life assurances might also become a growing substitute to unit link in the future. This is due to the fact that Swedish life assurance companies are now allowed to invest in foreign bonds and Swedish stocks to a larger extent. It may imply a lower risk for these investments through improved diversification and thereby an improved return per risk unit.

4 Conclusion

The focus of this paper has been on assessing a recently launched life assurance product in Sweden, namely unit link. Additionally, the intention has been to describe the unit link market as well as outlining the future of unit link in light of general trends, potential substitutes and new industry players.

The advent of unit link was a consequence of the deregulation of financial industry initiated during the late 1980's. Unit link enjoyed an instant growth in volume thanks to its flexibility *vis-à-vis* traditional life assurance and tax advantages *vis-à-vis* other saving alternatives. The underlying factor and a crucial future element is the current erosion of the Swedish government-funded pension programme.

The launch of unit link triggered the blurring process between the insurance and banking industry. Unit link has gained market share on behalf of traditional life assurance and has to some extent enlarged the aggregate life assurance market. From being a market dominated by two players, the market of today is more competitive with lowered customer fees.

Although foreign competition is expected to sharpen as a consequence of the internationalisation of financial markets, Swedish players will continue to enjoy the critical

factor of an established customer base. Furthermore, altered statutory regulation is not unlikely to worsen the current advantages of unit link in favour of IPS and the like.

5 Notes

- ¹ *Lagen om livförsäkringar med aktiefondsanknytning* [1989:1079]. The act changed name to *Lagen om livförsäkringar med anknytning till värdepappersfonder* [SFS:1117].
- ² There is a minor discrepancy between *insurance* and *assurance*. The term *insurance* is used when the client wishes to avoid a specific outcome in the future. An example is car insurance. The other term, *assurance*, is used when the client wishes to substitute uncertainty with certainty, e.g. the client wishes to receive a certain amount of money at retirement. Nowadays, the terms tend to be used analogously.
- ³ The underwriter's choice of investment is of course restricted by legislative boundaries, *Försäkringsrörelselagen SFS 1982:713* chapter 9 § 1-12. Historically, 80% of insured value was to be in bonds guaranteed by the Swedish government whereas the remainder was to be placed in any security except equity or equity funds. As of today, 50% of insured value is to be invested in interest bearing papers, out of which 10% may be in foreign bonds. The remainder is optionally to be invested in equity or real estate.
- ⁴ A conventional life assurance company is a mutual company, i.e. owned by the assured. This implies that excess returns – returns exceeding the guaranteed return – are distributed to the assured.
- ⁵ Skandia, Annual Report [1996].
- ⁶ Measured as the households' amount of savings as a percentage of their personal disposable income.

- ⁷ Affärsvärlden [15/1996], *Ideologiernas död*, p 34.
- ⁸ Interview, February 11, 1997.
- ⁹ Individuals, by definition, have different investment preferences. Consequently, this categorisation is subject to generalisation according to the authors' view.
- ¹⁰ According to Gunnar Loxdal, journalist, *Nyhetsbrevet Risk & Försäkring*, (interview February 12, 1997).
- ¹¹ Foreign players' market share is not considered. This is due to their not being obligated to report the geographic origin of their customers.
- ¹² Return on invested capital equals operating profit as a percentage of equity and interest bearing liabilities.
- ¹³ Franco F, Munzi G, "Public pension expenditure prospects...", *European Economy* 1996:3.
- ¹⁴ National Institute of Economic Research, *Konjunturläget, Hösten* 1986, 1988, 1990, 1992, 1994, 1996.
- ¹⁵ According to Maria Lindbergsson at *Försäkringsförbundet*, Skandia Link is the only unit link company offering customers to close out the agreement and withdraw the money (though at the cost of a significant fee)
- ¹⁶ According to Mr Passmark.
- ¹⁷ The eligible amount is dependent on the individual's income.
- ¹⁸ According to Mr Passmark.