



MPF Investment: What every employee should know



HONG KONG INVESTMENT FUNDS ASSOCIATION

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Hong Kong Investment Funds Association

Hong Kong Investment Funds Association

The Hong Kong Investment Funds Association (“HKIFA”) is a non-profit-making professional body that represents the investment management industry in Hong Kong.

Our roles

Established in 1986, we have two major roles, namely:

- *Promotion/education:* to promote Hong Kong managed investment products; and to educate the public about how to make use of funds for financial planning purposes; and
- *Consultation:* to act as the representative and consulting body in all dealings with the government and the regulation of unit trusts, mutual funds, retirement funds and other funds of a similar nature.

Our membership

We have about 50 fund management companies as full/overseas members. They manage about 70-80% of SFC authorized funds, involving total assets of about US\$220 billion. They also manage about US\$15 billion of Hong Kong retirement assets.

In addition, we have about 50 associates, which include trustees, lawyers, accountants and other professionals involved in the fund industry.

* Data were as at the end August 2000.

Our MPF initiatives

From year 2001 onwards, we would regularly provide MPF performance data as well as other industry data through the HKIFA website (www.hkifa.org.hk) as well as the media. In addition, we would undertake educational initiatives to facilitate employees to make informed investment decisions for MPF.



Hong Kong Investment Funds Association

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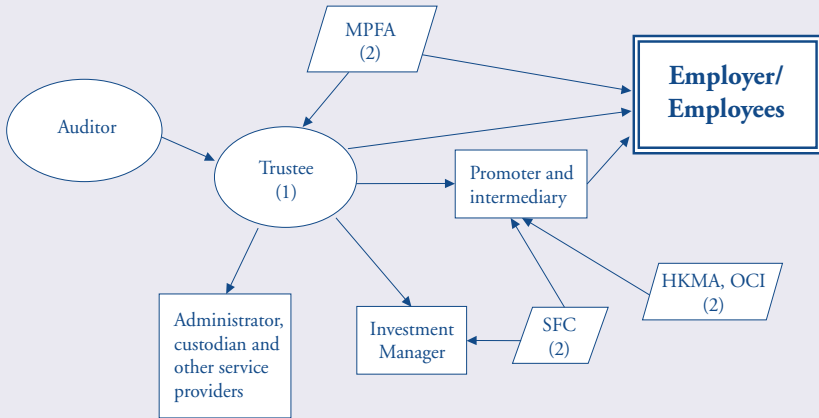
Associates

Alpha Global Asset Management Limited
AMS Trustees (H.K.) Limited
Arthur Andersen & Co.
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Barclays Global Investors North Asia Limited
Bermuda Trust (Far East) Limited
Butterfield Trust (Hong Kong) Limited
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Cypress International Investment Advisors Limited
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Hong Kong Bank Trustee Limited
ING Investment Management (Asia Pacific) Limited
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MPF Structure and Investment — An Overview

MPF Structure



Notes:

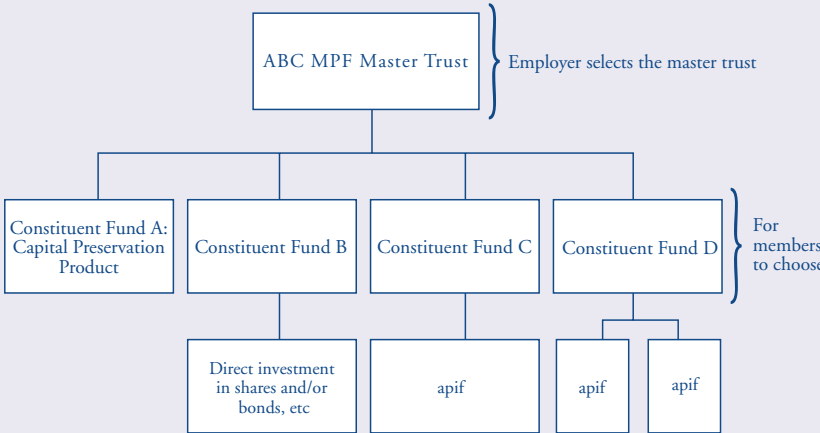
- (1) The MPFSO requires that every registered MPF scheme shall be administered, managed and maintained by an approved trustee. The trustee is responsible for appointing and monitoring the performance of all service providers of a scheme.
- (2) The Mandatory Provident Fund Schemes Authority (“MPFA”) is the lead regulator of the MPF System. In addition, the Securities and Futures Commission (“SFC”), the Office of the Commissioner of Insurance (“OCI”) and the Hong Kong Monetary Authority (“HKMA”) also have a role to play in the system.

MPF Investment—Member Choice

Member choice means that employees (who are members of an MPF scheme) can have the right to choose MPF constituent funds. However, member choice is limited to the choice offered by the master trust(s) chosen by the employer.

Employees choose constituent fund(s). A constituent fund invests in one or more approved pooled investment funds (“apif”) or invests directly. An apif can be a unit trust or an insurance policy.

An example:



Frequently Asked Questions



I am 30 years old. I have been buying stocks for a few years. However, I suffered heavy losses during the Asian financial crisis. Should I refrain from investing in stocks for MPF purposes?

- First of all, under MPF, you won't invest directly in individual stocks or bonds. You will invest in constituent funds ("funds").

There are different types of funds and they will, according to their pre-set investment objectives and policies, invest in a basket of stocks, bonds, and/or money market instruments. As to the key features of the various fund types, please refer to table 1. These funds provide you with professional management, diversification, choice, and convenience.



- While you may have suffered heavy losses during the crisis, it does not necessarily mean that you should shy away from funds that invest in stocks. Why?

In discussing MPF investment, you should always bear in mind the following:

- **the objective of MPF investment is to achieve long-term returns which can outperform salary inflation; and**
- **generally, you would not get your accrued benefits ("your MPF") until you reach the retirement age of 65.**

The importance of this is that with such a long investment time frame, you can probably be as growth-oriented as your time frame allows. You don't have to be too concerned about short-term



Table 1 — Main types of MPF constituent funds

Type	Equity Fund	Balanced Fund	Bond Fund	Money Market Fund	Capital Preservation Fund	Guaranteed Fund
Characteristics						
Other commonly used names (Note 1)	Aggressive Fund, Growth Fund, Global, Country or Regional Fund	Stable Fund, Growth Fund, Long-Term Accumulation Fund, Capital Stable Fund	Fixed Income Fund	Cash Fund, Hong Kong Dollar Saving Fund		Capital Guaranteed Fund, Minimum Return Fund, Guaranteed Return Fund,
Primary investment objective	Growth - Outperform inflation	Growth and some income - outperform inflation	Income and some growth - stable income stream	Deposit rates or slightly higher - capital security	Deposit rates - capital security	Guaranteed rates - capital security
Invest in	Equities and occasionally a small % in warrants	Equities and bonds, more aggressive ones have higher equity content	Bonds and deposits	Low risk deposits and money market instruments	Low risk deposits and money market instruments	Bonds, deposits and a very limited amount of equities
Geographical region	Single Country/Area Regional Global	Usually global	Single Country/Area Regional Global	Usually invests in a single money market only	In Hong Kong only	Hong Kong/ Regional/ Global
Volatility (Note 2)	High	↕	↕	↕	Low	
Expected rate of return	High	↕	↕	↕	Low	
Fees and charges	High	↕	↕	↕	Low	(Note 3)

Notes:

- (1) Fund may also be called "Portfolio" or "Product".
- (2) All funds are subject to risks as they are invested in securities whose value changes. Such changes may result from changes in perception of corporate profits, prospects, interest rates as well as the social, political, economic and currency changes (capital preservation funds are not subject to an exchange rate risk) of the country in which investments are made.
- (3) For guaranteed funds, there is a reserves/guaranteed charge, which is not levied by non-guaranteed funds.

volatilities because you are well-positioned to weather the ups and downs. Short-term movements in an investment would be of great relevance if you can only invest for a short period, say below 12 months. However, if you can invest your money for a period of 5, 10, years or more - in your case, 35 years, short-term ups and downs should not be a major concern to you as long as the overall trend is positive.

Chart 1 shows the returns you would have get if you put your money in bank deposits, bonds, and stocks in the past 15 years. You can see from the chart that more volatile investment such as stocks produced the highest returns despite the short-term ups and downs, whereas a seemingly stable investment such as deposits produced a much lower return over the longer term.

Chart 1: Cumulative Returns, 15 years to Dec 31 1999



But of course, apart from the time frame, you should consider other factors, such as your target retirement income, sources of retirement income, risk and return expectations, and financial conditions. And you should consult your MPF company, too. We will discuss these factors in detail later on.



Up till now, I have never made any investments and I put all my savings in the bank. I am not interested in any type of investments. Under MPF, can I just put all my contributions into my bank as a long-term fixed deposit?

No. You can't just put your MPF contributions into a bank deposit as fulfilling the statutory requirements.

Why not? Because:

- MPF funds must be in a trust structure to ensure maximum protection of scheme members' assets. Bank deposit does not operate under a trust structure - it can only be used indirectly through a trust fund; and
- to avoid putting all the eggs in a basket, there are rules under MPF to ensure diversification of assets, e.g. if a fund has HK\$100, generally not more than HK\$10 can be deposited with the same bank.



But there are some MPF funds, such as “Capital Preservation Products”, and “money market funds”, which invest in bank deposits, as well as bond and money market instruments. In terms of risk/return characteristics, they would be quite similar to bank deposits. Please see table 2 on page 7.



The name of “Capital Preservation Product” seems to indicate that it can protect my capital from investment losses. As I do not want to suffer any losses for my MPF, should I go for it?

All MPF schemes must offer a Capital Preservation Product (“CPP”) as one of the investment options.

CPP does not offer guarantees. It does not mean that if you put HK\$1,000 in a CPP, you will get back HK\$1,000. What it provides is that if the net return does not exceed savings account interest rate and the Compensation Fund Levy, the MPF company cannot charge administration fees.

The key objective of CPP is to provide a return that is similar to the bank’s saving rates. As such, it tends to adopt a conservative approach, such as focusing on investing in short-term HK dollar deposits and bonds.



Compared with stocks, deposits and bonds probably will provide more stable returns. But at the same time, it is more likely that the benefits may be eroded by inflation, resulting in inadequate benefits at retirement and defeating the key objective of MPF.



If CPP does not offer guarantees, does it mean I should go for “Guaranteed Funds” if I don’t want to suffer any losses?

“Guaranteed Funds” usually provide one of the following:

- soft - provide a guarantee over a particular period, e.g. career life, where a minimum return for that period is guaranteed;

- hard - provide a guaranteed return on a year-on-year basis.

Under MPF, funds offering soft guarantees are more common.



Usually, guarantees will only be provided when members meet certain qualifying conditions imposed by the guarantor, e.g. has to stay with a scheme for a number of years. If you withdraw earlier, it is likely that you will not be able to enjoy the guarantee.

Guaranteed funds can also result in a dilution of performance.

How would this happen?

There is no free lunch and to enjoy the guarantee, you have to pay something for it. To provide the guarantee, a MPF company:

- needs to set aside some money for rainy days. A fee, called the guarantee fee, will be charged for this. What this means is that less of the actual return is passed to members than from non-guaranteed products; and
- would primarily invest in short-term money market or bonds to ensure that the guarantee return is met. These instruments tend to provide a relatively lower rate of return, possibly below salary inflation in the long run.

As explained in Table 2, there is another type of fund, called money market funds, which is to a certain extent, quite similar to CPP and guaranteed funds in that they are all conservative types of investments. Their objectives are also quite similar, i.e. to produce returns that are similar to bank's savings rates. But money market funds do not charge a guaranteed fee and do not have as many restrictions as CPP.

Table 2 — A comparison of CPP, Guaranteed and Money market funds

	Capital Preservation Product (“CPP”)	Guaranteed	Money Market
Statutory requirement	As stated in the MPF regulation, all MPF schemes must offer a CPP.	Not compulsory. Some schemes offer this type of funds, while others do not.	Not compulsory. Some schemes offer this type of funds, while others do not.
Guarantee	No	Yes	No
Conditions for guarantee	N/A	Yes	N/A
Investment strategy	Conservative	Conservative	Conservative
Fees & charges	The MPF regulation states that if the net returns of the fund in a particular month cannot reach the prescribed savings rate announced by the MPFA, the trustee cannot charge any administration fees for the month.* For details on fees, please refer to the offering document.	No such requirement. For details on fees, please refer to the offering document.	No such requirement. For details on fees, please refer to the offering document.
Expected returns	Net return (after deducting all administration fees) comparable to HK dollar savings rate.	A pre-set minimum rate of guaranteed returns, but usually investors have to meet certain requirements before they can enjoy the guarantee.	Comparable to savings rate.
Chance of incurring losses	Possible, but chances are relatively small.	Unlikely, if you meet the prescribed conditions.	Possible, but chances are relatively small.
Invest in	* HK dollar assets: bank deposits, short-term bonds * Use of stocks & derivatives not permitted.	HK and non-HK dollar assets: bank deposits and short-term bonds. A small percentage may be invested in stocks or derivatives.	HK dollar and non-HK dollar assets: short-term interest bearing securities, such as certificates of deposits and treasury bills.

* *Note:* Assuming that the prescribed savings rate for the month is 4%. If the net return of the CPP is 5%, the trustee can at most charge 1% (5%-4%). If the administration fees are 2% the 1% that can not be charged can only be deducted from the net returns in any one of the following 12 months, and only after the administration fees of that particular month has been deducted.

No matter whether you invest in CPP, guaranteed funds or money market funds, you should bear in mind that while they can offer greater safety of capital than stock or bond funds, it is likely that their long run returns would be below inflation.

Inflation risk is probably one of the most, if not the most important risks, that you have to face in managing your retirement investment.



Why is inflation risk so formidable?

If one looks at the inflation figures in Hong Kong in the past 17 years, one would note that the average annual inflation was at about 7%. What this means is that even at an inflation rate of 7%, you would need an income of over HK\$77,000 in 20 years' time to have the same purchasing power that HK\$20,000 has today.



To keep up with the rise in prices, you have to find a way that can enable your income to grow at the same, if not a faster, rate. If not, your purchasing power and living standards will drop.

This is particularly important because life expectancy continues to increase — in Hong Kong for male, it is about 78 years old and for female, about 82. Thus, if you retire at 60, you have over 20 years to prepare for. You can't rely too much on social security because the allowance is meager — you can only get a few hundred dollars per month.

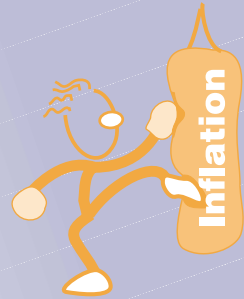
Thus, with a longer post-retirement duration, you have to save more at your working life, not only because you have to prepare for your retirement, but because the future will cost more.



Can I beat inflation by putting money in deposits or in government papers?

It is quite unlikely because the interest rates on deposits and on government papers, especially those issued by governments with strong finances, (e.g. US) are often below inflation.

The key solution is to invest in funds that have a higher chance of producing returns that can exceed inflation, such as stocks. This can probably be shown by the returns of the global stock market (16%)*, or the Hong Kong stock market (20%)* vs. inflation in Hong Kong (7%)* in the last 17 years (1983-1999). (*Source: Watson Wyatt)



But of course, higher risks usually go with higher returns. So, before you invest, you have to be clear about your risk tolerance level.



It's all very well for you to say that we should try to achieve real growth. But my concern is that if my fund manager is too aggressive and uses a lot of derivatives and margin trading... or if he does a very bad job and loses most or all of my money, I would be left with nothing.



The concern that you have relate to the risk of losing some or all of your investment.

Members can incur investment losses, but the traditional approach of retirement fund investing and the check and balances under MPF can, to a large extent, help minimize the losses to which scheme members would be exposed.

Performance of Hong Kong retirement funds has traditionally been less volatile than the stock markets, or equity funds. Please see table 3.

Table 3 — Performance of Hong Kong Retirement Fund vs. Hong Kong Stock Market

Year	HK Retirement Fund	Hang Seng Index
1999	30.7%	68.8%
1998	8.0%	-6.3%
1997	-7.3%	-20.3%
1996	16.0%	33.5%
1995	15.4%	23.0%
1994	-13.3%	-31.1%
1993	53.5%	115.7%
1992	5.1%	28.3%
1991	16.2%	42.1%
1990	-3.4%	6.6%
1989	17.9%	5.6%
1988	11.6%	16.7%
1987	5.3%	-10.3%

Source: Watson Wyatt

This is mainly because retirement funds tend to adopt a very prudent approach, i.e. they aim to achieve a reasonable rate of return which is above inflation, but at an acceptable level of volatility. Also, their diversified and balanced strategy also helps to reduce the volatility of the funds.

Furthermore, MPF is subject to very stringent investment guidelines and restrictions, e.g.:

- if the fund has HK\$1,000, not more than HK\$100 can be invested in securities issued by a particular company
- a scheme cannot short sell



- generally, a scheme cannot borrow to invest
- derivatives can only be used in very limited circumstances.

In terms of monitoring, apart from the MPFA and the SFC, there is the trustee, which will monitor the operation of fund managers on a day-to-day basis to ensure that they invest according to the laws and regulations, as well as the fund's trust deed. The trustees are accountable to scheme members, i.e. employees, but not the fund managers. They have a duty to ensure that the assets are properly invested. The trustee has to exercise its powers of investment for the best interest of the beneficiaries of the scheme.



Thus, there are safeguards and mechanism in place to ensure that the investment management activities are carried out properly.



Apart from losing capital, are there other types of risks under MPF that I have to be aware of?

Most investments carry risks. They can generally be categorised as follows and you should consider each of them before investing:

- Earn less than inflation or “purchasing power risk”
- Earn less than you expect or need, e.g. not have sufficient money to lead your desired lifestyle after retirement
- Lose some or all of your original investment
- Earn less than you could have if you have put it in other investments

- Value of your investment moves up and down over the short term
- Have to sell the investment when it is not performing well



Table 4 shows the risks commonly associated with different types of investments.

Table 4 - Relationship between investments and risks - based on historical evidence

Assumptions: all instruments are invested over a long term.

Type of risks	Bank deposits	Bonds	Stocks
Earning less than inflation, i.e. risk of losing "Buying Power"	Possible in the long term	Possible in the long term	Unlikely in the long term
Investment return less than you expect	Unlikely	Possible	Possible
Losing some or all of your initial investment	Very unlikely (but can happen if a bank goes bankrupt)	Possible - if not held to maturity (e.g. bond price drops)	Possible (e.g. share price drops)
Earning less than you could have with other investments over a long period	Possible	Possible	Unlikely - depending on the nature of individual stocks
Value of your investment moves up and down over the short term - known as volatility	Unlikely	Possible	Very likely (Greater movement than in bonds)
Losing some of your capital if you have to sell the investment when it is not performing well	Unlikely	Likely	Very likely



What do investment managers do with my MPF contributions and how do they invest?

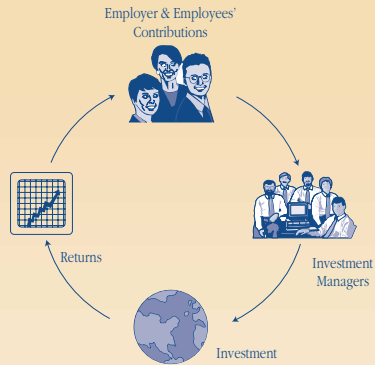
Investment managers are entrusted with the task of developing investment strategies and making investment decisions in accordance with the investment objectives stated in the MPF's offering document.

Investment managers adopt a long-term investment approach and invest the pool of assets in a wide range of securities. The objective is to diversify investment risks and to achieve the best returns for scheme members.

Diversification is effective at two levels: namely to provide an attractive return and to minimise individual security's impact on a fund's overall portfolio.

Diversification is achieved in a number of ways:

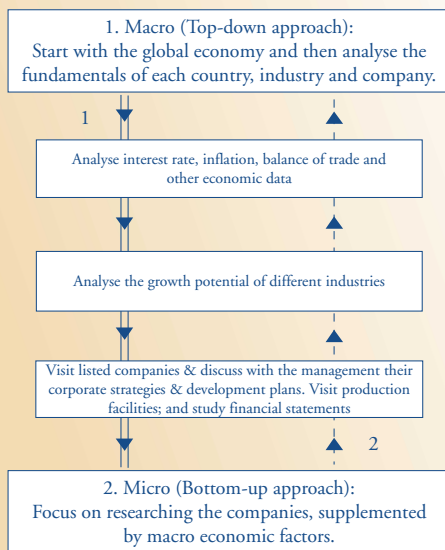
- **By the number of securities held:** A fund typically invests in a few dozens to over a hundred securities. Under MPF, there are detailed rules to ensure sufficient spread of investments. For example, if a fund has HK\$1,000, it cannot hold more than \$100, i.e. 10% in securities issued by a company.
- **Among different types of securities:** Mainly applicable for balanced funds. They may invest in stocks, bonds, and money market instruments to ensure extensive diversification.
- **Across industries or markets:** Often adopted by equity funds, by investing in different industries or markets' securities. Bond funds may also use this strategy, such as by investing in bonds issued by different governments or corporations.



- **Within maturity ranges:** A strategy often employed by bond and money market funds. They typically diversify assets in securities of different maturities.

An investment management team typically consists of a number of investment professionals. The roles of each manager may vary. For example, for an equity team, some may research the effect of general economic trends, such as inflation or interest rates; while others may focus on individual industries, sectors or markets.

Usually, the fund manager will either adopt a top-down or bottom-up approach.



A top-down approach means that the manager will study the macro economic conditions and then goes down to micro corporate factors. The reverse will happen for a bottom-up approach. Some fund managers use the former, some the latter, while others adopt a mixed approach.

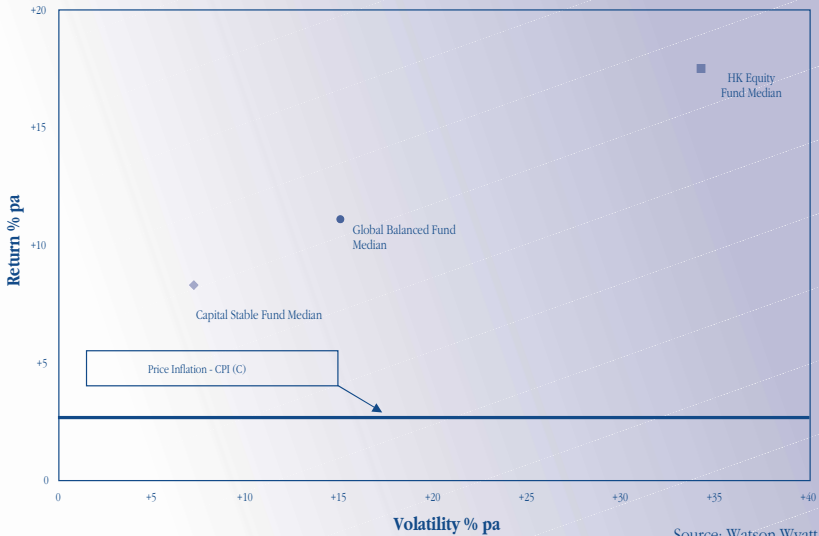


It is often said that if I can take more risks, I can have higher returns. How true is it?

Generally speaking, it is fair to state that the greater the risk, the greater the potential reward. By investing in things such as stocks, bonds, you are likely to earn more than by keeping all your money in bank deposits.

Chart 2 highlights the relationship between volatility and return for various types of investments. Of course, there is no guarantee that funds with higher risks must produce higher returns, and that these rates will be achieved in future, but they can at least show the relationship between risks and returns.

Chart 2: Risk and Return — 5 years to December 31 1999



Source: Watson Wyatt

What is “volatility”?

“Volatility” is the measure of how much an investment’s value moves up and down over a certain time frame, e.g. 1 year, 3 years, etc.

Generally speaking, higher volatility means that there is greater risk that the values will move up or down (sometimes quite sharply over the short term). Lower volatility means that it is more likely to maintain a stable value.

But volatile investments are generally “growth investments” which means despite short-term movements, the value of your money is more likely to increase over the long term, i.e. volatility can mean better potential long term returns.



Does it make a lot of difference if I earn 1% more or less?

Yes, because of the power of compounding. Money that you invest may earn interest, dividends, or capital gains. If you let the interest, etc. stay invested, they will help generate additional earnings and help you build up the assets more rapidly. E.g. if you put HK\$1,000 into a savings account, you earn interest (e.g. 5%) on this HK\$1,000. Your HK\$1,050 will then earn 5% and it rolls on and on.

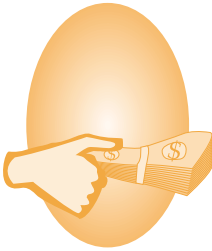


1%
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An example under MPF may help explain why a difference of 1% can mean a lot in dollar terms. If a member has a contribution period of 47 years and if his investment returns are: (chart 3)

- 1% below inflation
- 1% above inflation
- 3% above inflation

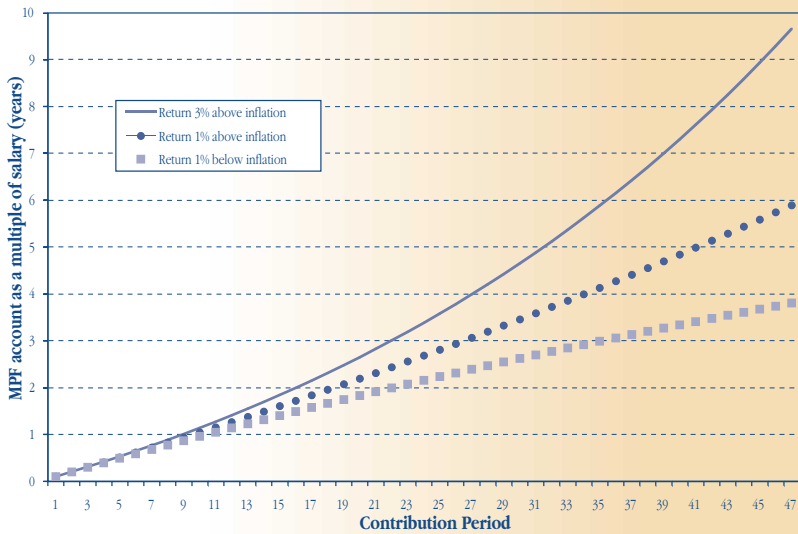
his lump sum MPF payment will be equal to:



- 3.8 years
- 5.9 years
- 9.7 years

of the final salary respectively upon retirement.

Chart 3: Growth of MPF Account (Multiple of Annual Salary)



Source: Watson Wyatt

(Assumptions: annual price inflation: 4%)



When I get back my MPF savings at 65, the stock market plunges 30%. Does that mean my MPF would also drop by 30%?

It is quite unlikely.

A key reason is that by then, it is very likely that only a small portion of your MPF will be in stocks. Your investment in MPF is not static - on a regular basis, your MPF company may offer a service to review your portfolio with you to see if the mix (e.g. the percentage in stocks, in bonds and cash) continues to meet your needs and suit your financial background.



In other words, you can adjust your investment mix according to the phases of your lifecycle. As you grow older, the percentage of stocks in your portfolio would probably be reduced gradually (e.g. when you are 30, your stock content may be about 80%; but when you are 60, the bulk of your investment may be in money market funds or bond funds. Stocks may only account for about 10% of your portfolio).

Thus, even when there is a market crash when you reach 65, the impact on your overall portfolio will be minimal as your holding in stocks is probably very low then.

Moreover, you can choose to stay in the fund when you reach 65 – some MPF companies will be able to offer this option to you. If you don't need the cash immediately, you can let the money stay in the fund to continue to grow and cash out when the market recovers.



If I invest in an equity fund, and the fund plunges substantially because of a market crash? Should I immediately switch to a low-risk fund?

It is inevitable that stock markets have ups and downs. Before you invest, especially in “growth” investment, you have to fully understand the risks involved. You must also make sure that the risks are within your tolerance levels.

Most MPF companies will provide facilities to help you ascertain your risk tolerance levels.

What happens if you switch from an equity fund to a money fund or a lower-risk fund when there is a market crash? It is very likely you would immediately realise losses.



In fact, if the overall trend is positive, there is no strong reason why you should be in a hurry to redeem because MPF investment is in terms of decades, rather than in weeks or months. If your objective is to achieve growth, you should stick to it and refrain from being swayed by short-term movements.

One point worth noting is that, as MPF contributions are made on a regular, rather than on a lump-sum basis, you can enjoy the benefit of dollar-cost-averaging.

How does this work?

Under MPF, most members’ contributions are made on a monthly basis. By investing monthly rather than on a one-off basis, the risk of timing the market

wrongly or going into the stock markets when they are over-valued are minimised. Regular contributions mean that as the price drops, you can buy more units; and when the price rises, you will buy fewer units. This process helps you average out the costs of your units and smoothes out market volatilities. Example (with \$1,000):



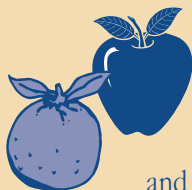
	<i>Original price</i>	<i>Price falls</i>	<i>Price rises</i>
unit price	HK\$10	HK\$8	HK\$12.5
units that can be purchased	100 units	125 units	80 units



It is said that in selecting a fund, one can use the fund's past performance data as reference. Are the data reliable? How should I interpret the data?

There are detailed rules governing how MPF companies can use fund performance data for marketing purposes.

Before discussing how to interpret performance data, we would like to draw your attention to the fact that as MPF funds are virtually new funds, at present, there are generally no historical performance data.



At best, what you can do is to look at the historical performance data of similar funds to have a better understanding of the fund manager's experience and track record in retirement fund management. But MPF funds and non-MPF funds differ in many areas, including structures, and governing regulation, etc. and thus their performances are not directly comparable.

In general, when you study the past performance of a fund, you can:

- look at its performance over different time frames, say one, three, five, and ten years to understand how the fund has performed in different market conditions. Some funds may perform better in bull markets, while others may do better in bear markets. The most important point is whether its performance is consistent over the long term - a fund that comes first in one year and then drops to the bottom in the next may not be a good pick. A fund that has consistently been in the first or second quartile in the last ten years may be more preferable because its investment process is well-tested.



To check how stable the fund's returns have been, you can also look at a fund's year-on-year performance figures as they can tell you whether the fund earns most of its returns in one year, or steadily over a few years.

- compare its performance with its peers, i.e. those with the same investment objectives and strategies. For example, you can compare X global equity fund, against Y global equity fund. But it would not be appropriate to compare it with B bond fund.
- compare it against the relevant benchmarks, e.g. you may compare a HK equity fund against the Hang Seng Index but you should not compare it against a global bond index.

The last two points highlight the importance of comparing like with like and they should be seen together. For example, if your global fund produces a return of 15% in a year, you may be very pleased because it is 5% above the

global index. But if other global funds on average outperformed the index by 10%, then your fund's performance is actually below average.

It must be remembered that past performance is not indicative of future performance and can only be used for reference.



If I can't rely solely on past performance, what factors should I consider when I choose a fund?

Each MPF scheme would, on average, comprise five to six funds, and each of them has its own investment objective.

As to what types of fund(s) you should choose, you should first ask yourself:

- *how many years before you reach 65:*
e.g. if it is longer, you can adopt a more growth-oriented approach and if it is shorter, say less than five years, you probably would rely more on money market funds or those that can provide more stable returns.



- *what is your investment objective or what sort of returns do you expect to get:*
e.g. if you wish to outperform inflation, you probably need to consider "growth" investment, such as growth or balanced funds.
- *what is your target retirement income:*
it's useful if you can set an approximate level of expected income in retirement - this will determine whether you need to contribute more than 10% (5% from employer and 5% from employee) into the MPF. It is estimated that to maintain the same standard of



living during each year of retirement, your MPF needs to amount to about 60-80% of your final year salary, adjusted for inflation.

- *sources of retirement income:*

e.g. if you do not have other sources of income, there is a greater need for you to contribute more than 10%.

- *risk tolerance level:*



e.g. if you are very edgy whenever there are any market ups and downs, you probably should opt for more stable products, but of course, the tradeoff is that you may get a lower return than if you put the money in growth investments.

- *what is the nature of each fund, e.g.*

- what is its investment objective and strategy

- what are the key risks involved, e.g.

- *Inflation Risk, or the Purchasing Power Risk –*

Inflation risk is related to the impacts of rising prices on investments. If an investment's return is lower than inflation, your money will have less purchasing power as time goes by.

- *Interest Rate Risk –*

Interest rate risk is mainly relating to the sensitivity of an investment's price to changes in interest rates. This type of risk is generally associated with bonds but it can apply to equities as well. In bonds, the price carries an interest rate risk because if bond prices rise, outstanding bonds will not remain competitive

unless their yields and prices are adjusted to reflect the current market situations. There is an inverse relationship between bond prices and bond yields: as bond yields go up, bond prices go down, and vice versa.



- *Market Risk* – Both stocks and bonds involve some degree of market risk - that is, the risk that you may lose some of your principal due to price volatility. Stocks generally are more volatile than bonds: stock prices can rise or fall dramatically due to changing investor demand; while prices of existing bonds can fluctuate with changing interest rates.
- *Credit Risk* – Credit risk involves the danger of losing all or part of your capital because of the failure of the issuer. Credit risk varies with investment products. Bonds backed by governments with sound financial background are in general more secure and have lower credit risks. Long-term bonds usually have higher credit risk than short-term bonds because of the former's increased uncertainty that results from holding bonds for many years.
- *Liquidity Risk or Marketability Risk* – This relates to the risk that you may not be able to liquidate your investment when you need cash. Government bonds or blue chips, for example, are relatively easier to market; while fourth and fifth liner stocks tend to be more difficult to market.

- *Currency risk* –
The risk that the value of an overseas investment as measured in the investors base currency is adversely affected by movements in exchange rates.
- *Interest rate risk* –
The risk that interest rates will be raised, e.g. by the Central Bank to control inflation, adversely affecting the value of the asset portfolio.
- *Political risk* –
Coups, wars, etc, typically result in a sell-off in financial assets. Political risk can also result in assets being frozen, currencies becoming non-convertible, etc.

- what are the fees and charges
- is the fund volatile* (a commonly quoted number is the standard deviation - generally speaking, the larger the number, the higher the risks)
- what is the asset size* (some studies indicate that if a fund size is too small, e.g. say below US\$5 million, it is not economical to operate)



- who manages the fund and how has it done in the past*
- what services are available (pre and post-sales)

(* As most MPF funds are newly set up, these factors will only be relevant in a few years' time)



As an employee, what are the fees and charges that I have to pay?

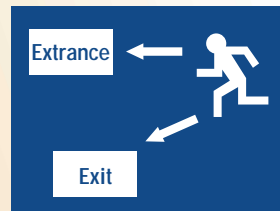
Under MPF, most of the fees are borne by employees. There are basically two types of fees/charges:

- **ongoing costs:** those that are incurred for the whole investment period, e.g. investment management fee, trustee/custodian fee, guarantee fee, legal and administration fees.



You don't have to pay them out-of-pocket - they are accrued on a daily basis. In other words, they are taken out from the fund's assets before it is divided amongst the investors. For example, a fund has total assets of HK\$100 and the accrued expenses are at HK\$1. The HK\$1 will be taken out from the HK\$100 and the remaining HK\$99 will be shared amongst investors.

- **one-off costs:** costs associated with buying and selling funds: e.g. bid/offer spread. They are computed as a percentage of the net asset value and will only be incurred when there is a transaction, e.g. entry, switching or exit.




Some MPF funds may charge a fee for the provision of services, e.g. for providing additional statements.

The levels of fees are spelled out clearly in the offering document. When you study the fees, you should check the current as well as the maximum fees. If a MPF company wishes to change the fees, it has to give three months' advance notice to the investors.

Two more points worth mentioning:

Fees **Returns**



Fees should not be considered in isolation from returns. Some investments, e.g. fixed deposits have relatively low fees, but they tend to provide lower returns. Investment like stocks may seem to be more expensive, but they provide relatively higher returns.

Also, you should consider fees in relation to time frame: one-off costs for an investment held over 10 or 20 years will have very different impacts compared with one held over six months.



How is the price of my unit arrived at and how can I monitor my investment?

Most MPF funds are valued daily, though there are some which are valued weekly.

Example - A balanced fund, with daily dealing

On every dealing day, the trustee will value the securities held by the fund after dealing closes.

Assumptions:

(i) number of units in issue: 50,000

(ii) the value of portfolio is as follows:

<u>Portfolio</u>	<u>Value (HK\$)</u>
A stock	100,000
B stock	200,000
C bond	100,000
Cash	5,000
<i>Gross asset value</i>	<u>405,000</u>
Fees & charges	(5,000)
<i>Net asset value</i>	<u>400,000</u>

Value of each unit:

$$\text{HK\$}400,000/50,000 = \text{HK\$}8$$

At which prices do I buy and sell?

In general, there are two types of quotations and MPF companies will use either one approach:

- (i) bid and offer
- (ii) NAV

Bid and offer

If you wish to switch out of this fund, you will sell at HK\$8 (or at a slightly lower price due to fiscal charge). If you check the fund price quotation table, find the “bid price” column. In this example, you will find HK\$8 in the column.

If you wish to subscribe for this fund, you will buy at a higher price, i.e. $\text{HK\$}8 \times (1 + \text{spread } \%)$, e.g. if the spread is 1%, then you will buy at HK8.08. In the quotation table, you can find this price from the “offer price” column.

HK\$ 8.08 is the offer price. Bid and offer is from the angle of the MPF company. In short, you buy at the offer (higher) price and sell at the bid (lower) price.

NAV

If you wish to switch out of this fund, you will sell at HK\$8 (NAV).

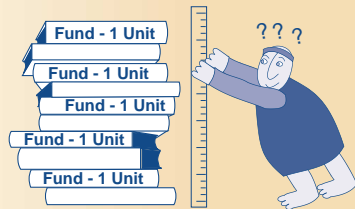
If you wish to buy into this fund, you will buy at $\text{HK\$}8 \times (1 + \text{front end load } \%)$

MPF funds will publish their dealing prices in newspapers specified in the offering documents. Also, some MPF companies provide hotlines and websites for you to check the prices.



How and when would I know how many units I am entitled to?

For example, on Monday, you inform your MPF company that you would put new contributions of HK\$1,000 into a balanced fund. Assume this fund has daily dealing.



At what price will the company buy units for you?

The price published in Monday's newspaper? No, it will use the price published in Wednesday's newspaper (or afterwards). Why?

Because there is only one valuation point at each dealing day, and the valuation point is usually at the day close. Thus, when you place a sell or a buy order on Monday, you would only know the dealing price on Tuesday (by phone or through the website). This mechanism, called forward pricing, aims to ensure that **all investors** are treated fairly.

Example:

Amount invested (order placed on Monday)	HK\$1,000
Unit price*	HK\$10
Units entitled to	= 100 units

* It will usually be available in the print media on Wednesday or afterwards.
But you can check it by phone or through the website on Tuesday.



How can I know whether the fund(s) that I invest in are making profits or losses?

You can calculate it based on the price quotes:

Example I:

	<u>Unit price (HK\$)</u>
You buy at:	\$10
You sell at:	\$15
Capital gains	\$5 (an increase of 50%).

Example II:

	<u>Unit price (HK\$)</u>
You buy at:	\$10
You sell at:	\$8
Capital loss	\$2 (a drop of 20%).

Generally speaking, your funds can make money for you through:

- *income growth*: e.g. funds that invest in bonds or stocks are expected to produce interests or dividends, which will be reinvested. Only in very limited circumstances prescribed by the MPFSO, such as retirement, death and total incapacity will they be paid out.
- *capital growth*: if the stocks, bonds or other securities held by a fund increase in value, the value per unit will rise correspondingly.



Some people say that MPF is a long-term investment. Does this mean that I should stick to the same fund that I chose from day one until retirement?

MPF is a long-term investment, but it does not necessarily mean that you should stick to the same fund throughout the entire working life.

On a regular basis (e.g. annually or semi-annually), your MPF company may review with you your financial conditions, as well as investment objectives/needs. It will, based on the outcome of the review, provide professional input regarding whether there is a need for you to modify your investment strategies and portfolio mix.



Of course, you should also do your homework and monitor the fund performance regularly, say quarterly, to see how they compare with similar funds or relevant indices. You should, apart from checking the monthly pay slips, check your annual benefit statement as well as other additional statements provided. It would also be useful if you can study the market updates so as to have an overall understanding of the investment climate.



(Note: From 2001 onwards, HKIFA will provide MPF performance data through its website: www.hkifa.org.hk and various channels.)



Many MPF companies provide a number of free switches per year. How should I make use of them?

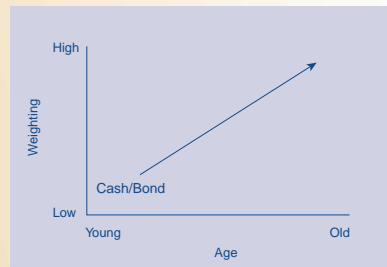
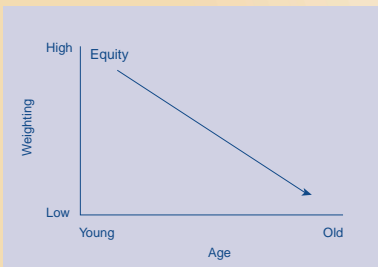
Switches should primarily be used to tie in with major changes in:

- your career;
- your financial conditions; or
- the investment climate.



Switches relate to how you would like to have your investment mix: i.e. whether you want to have more in stocks or in bonds, or more in cash? In determining the mix, you have to consider:

- *how many years before you retire:*
e.g. when you are younger, say in the early 30s, you may invest more in stocks than bonds and cash. But as you grow older, say in the early 60s, you may wish to hold more bonds and cash.



- *what is your goal:*
if you invest primarily for growth, you aim to increase the value of your investment over the long term. If you invest in income funds, you aim to receive a regular flow of income. If you wish to have stability, you

aim to protect investment from loss. If your goal changes from income to stability, you may need to rebalance your portfolio accordingly.



If I think that the performance of the MPF company chosen by my employer is very poor, can I join another provider?

No, if you are with employer A and it chooses a MPF company, you have to stick with it as long as you are with A.

But of course, you can relay your concerns to A if you are dissatisfied with its performance and services. However, the final decision is still vested with the employer.



However, when you change jobs, you have a lot of flexibility in determining where to invest the MPF accrued from your previous employers. For example, if you have HK\$10,000 accrued from your previous jobs, you can:

- switch it to your new employer's provider;
- keep it under your previous employer's master trust; or
- invest in a third provider's fund (neither of the above).

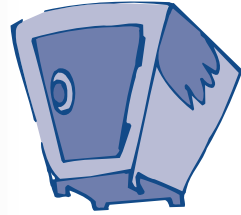
However, your new contributions still have to go into the MPF company that your new employer uses. Always remember your employer selects the scheme and you select the constituent fund(s).



Is MPF the same as authorised funds available in the market i.e. even though the MPF company goes bankrupt, I can still get my money back?

MPF operates under a trust structure and your assets are ringfenced, i.e. your assets are segregated from those of your employer, trustees or other service providers.

Even in the worst scenario, if any of these companies go bust, their debtors will not be able to lay hands on your MPF and your MPF will remain intact.



Is my employer responsible for teaching me how to invest for MPF purposes?

No, the responsibility lies with your MPF company which will usually help you analyse your risk/return profiles and financial conditions. It will also explain the risks and returns characteristics of each fund as well as other pertinent information about the funds. It will usually, on a regular basis, provide you with market updates, etc.



Under MPF, your employer's duties are to:

- enroll staff into a MPF scheme;
- calculate MPF income and contributions;
- pay contributions;
- issue pay record to members after payment of contributions;

- notify trustee of any changes in employer and employee's information; and
- maintain records.



If I think that the return of MPF investment is very attractive and would like to contribute more than 10% (i.e. the mandatory percentage—5% from employer; 5% from employee), can I do so? Will the excess have the same protection as the mandatory portion?



Certainly, both the employer and the employee can make voluntary contributions on top of the 10% mandatory percentages.

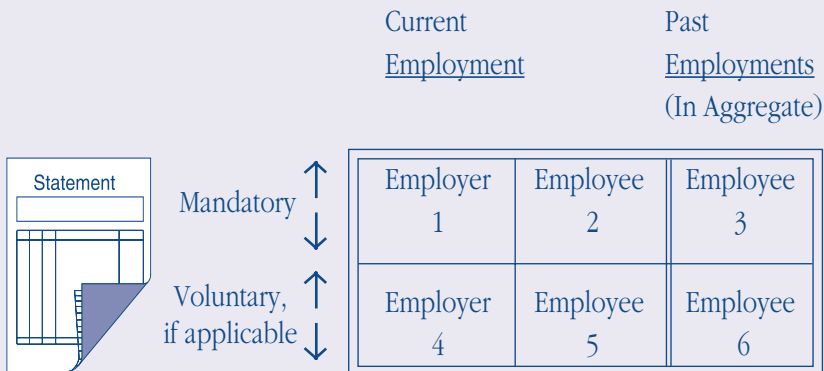
In fact, studies indicate that 10% is not sufficient for retirement and to ensure that you can maintain your pre-retirement standards of living, you need to invest more.

You should consult your MPF company and based on their advice, determine the optimal level of contributions.

You must remember that the combination of time and compounding means that the earlier you start to save and the more you save, the more you can get on retirement. It is estimated that for every ten years you delay in starting to invest for retirement, you need to save three times as much each month to catch up. Thus, the sooner you begin investing for retirement, the better.

Voluntary contributions basically enjoy the same kind of protection as mandatory ones, except that they are not subject to the requirements of vesting, preservation and portability.

In general, in your statement there would be a number of accounts as follows:



I am now 30 years old with a monthly income of \$10,000. How much will I get when I am 65?

Please refer to Chart 4.

New entrant to MPF Scheme

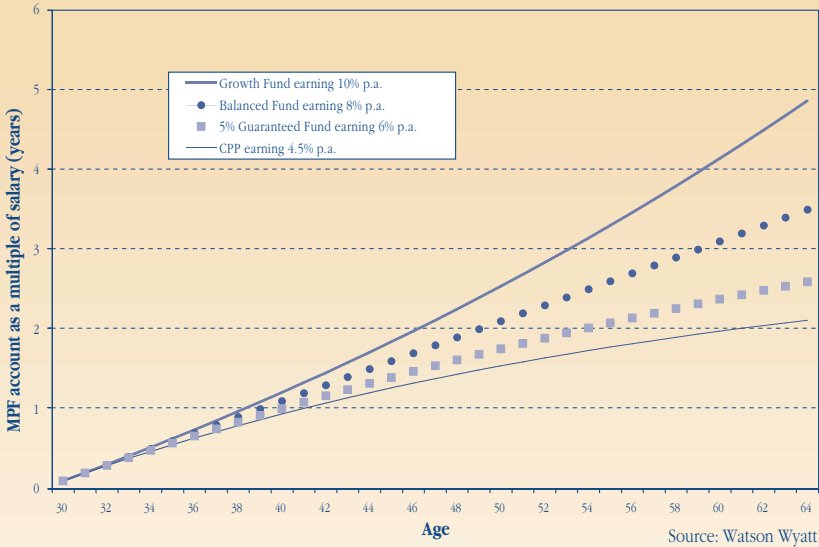
Age at entry: 30
 Retirement: 65
 Salary: HK\$10,000 p.m.
 Salary Inflation: 8% p.a. (Assumptions only. The inflation rate can be higher or lower.)

Whole of his MPF contribution invested in:

- Scenario 1 - Growth Fund earning 10% p.a.*
- Scenario 2 - Balanced Fund earning 8% p.a.*
- Scenario 3 - Guaranteed Fund earning 6% p.a.*
- Scenario 4 - CPP earning 4.5% p.a.*

* These data are examples only and investment involves risks.

Chart 4: Growth of MPF Account (Multiple of Salary)



MPF Account/Final Salary:

- Growth Fund, assuming 10% p.a. (4.9 years)
- Balanced Fund, assuming 8% p.a. (3.5 years)
- Guaranteed Fund, assuming 6% p.a. (2.6 years)
- CPP, assuming 4.5% p.a. (2.1 years)

– End –

This booklet has been prepared to help you understand more about investment for MPF purposes - in particular relating to MPF master trusts. The information given is for reference only and is not a substitute for professional advice, which you should seek before you make any investment decisions.

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