

Risk table - key risks with respect to the MPF system and the features/mechanisms in place to mitigate and address the risks

Types of risk	Risk features/mechanism	What features/requirements in MPF can help mitigate the risk?
Market risk	<p>Investment involves different types of risks. When you choose to invest in a specific market, some of the risks may be minimized using various techniques whilst others may not be.</p> <p>There are certain risks that are attributable to market wide risk sources. These risk sources are common to the whole economy and affects prices of securities across the board. Interest rate movements, recession, political uncertainties and wars, etc. are examples of risk sources that affect the entire market. These risks are termed “market risk” or “systematic risk”.</p> <p>If you invest in only one market, you cannot escape from being exposed to market risk. However, if you invest in a number of markets that tend to move differently from one another, you are expected to benefit from diversification and reduce the risk exposure to a single market. .</p>	<p>To mitigate market risk and facilitate diversification among markets for MPF funds, :</p> <ul style="list-style-type: none"> - the MPFA has issued guidelines on the list of approved stock and future exchanges for MPF investments; - not more than 10% of the assets of a constituent fund may be invested in securities listed on an exchange that is not an approved exchange; - many schemes provide mixed assets funds/lifestyle funds which diversify market risks to a certain extent as they are investing in global securities. <p>Others:</p> <ul style="list-style-type: none"> - For MPF members who prefer to minimize market risk, they should avoid investing in single country equity funds. By investing in more diversified funds or mixed assets funds, the fund performance is less prone to problems associated with a single market. - the preservation requirement of the MPF system requires that members retain their MPF benefits in an MPF scheme until they reach 65 (or until members meet other withdrawal criteria). Therefore, members’ benefits will be invested for a long term. The magnitude of market risk tends to move along the economic and business cycle. MPF members do not need to be too concerned about short to medium term market risk.
Specific risk	<p>Specific risk, sometimes referred to as non-systematic risk, is inherent in each investment. Since specific risk affects a very specific group of securities (such as stocks within the same industry) or an individual security, it can be reduced through appropriate diversification.</p> <p>An example of a specific risk to an industry is high oil price. High oil price tends to have negative impact on airline stocks as oil consumption is a key component to the cost base of airlines. With oil price goes higher, the share prices of companies in the airline industry are likely to suffer together, though perhaps not by the same magnitude.</p> <p>An example of a specific risk to an individual security is management change. If one company has been very well managed but there is subsequent senior management</p>	<p>The professional investment management of fund managers via sector allocation, stock picking and risk monitoring process helps to reduce specific risk. Besides, the MPF system imposes other measures to mitigate this risk, including:</p> <p>Restrictions to limit the exposure of a particular security or issuer in constituent funds:</p> <ul style="list-style-type: none"> - the total amount invested in securities and other permissible investments issued by any one issuer must not exceed 10% of the assets of a constituent fund; - a constituent fund must not acquire 10% or more of securities or other permissible investments of a particular class issued by one particular issuer; - mixed assets funds/lifestyle funds are investing in a diversified basket of global bonds and equities. As such, company-specific or sector-specific risks associated with a particular group of securities can be diversified, causing relatively less impact on the fund performance. <p>Measures to mitigate credit risk/counter-party risk of debt securities and deposits:</p> <ul style="list-style-type: none"> - all debt securities must satisfy relevant minimum credit ratings set by the MPFA, unless they are issued by the Hong Kong Government, or other exempt authorities;

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	<p>change, its share price will be affected. This is a specific risk that does not impact on other companies.</p>	<ul style="list-style-type: none"> - the assets of a constituent fund may only be deposited with an authorized financial institution or an eligible overseas bank that satisfies a minimum credit rating set by the MPFA; - total deposit amount placed in an authorized financial institution or an eligible overseas bank may not exceed 10% of the assets of a constituent fund.
Liquidity risk	<p>Liquidity risk refers to the risk stemming from the lack of marketability of an investment that cannot be bought or sold quickly enough to prevent or minimize loss. Liquidity risk arises from the failure to recognize or address changes in market conditions that affect the ability to liquidate assets quickly and with minimal loss in value. In the case of funds, liquidity risk is related to the difficulty faced by the fund manager in selling securities of a portfolio to raise cash to honor requests for redemption. Manifestation of liquidity risk is particularly significant in the event of a massive redemption when a financial event sparks concern among investors.</p> <p>Liquidity risk tends to compound other risks, thus it is difficult or impossible to isolate liquidity risk. Accordingly, liquidity risk has to be managed in addition to market, credit and other risks.</p>	<p>Under investment managers' professional management, liquidity risk is minimized through the process of stock selection and portfolio diversification. Besides, effective liquidity risk management helps to ensure investment managers are able to meet their cash flow obligations, which are uncertain as they are affected by external events and investors' behavior, such as switching. Mechanisms in place by investment managers include:</p> <ul style="list-style-type: none"> - maintenance of a certain cash level in each fund to handle daily redemption and switching requests; - establishment of a liquidity risk tolerance; - identification and measurement of the full range of liquidity risks, including contingent liquidity risks; - maintenance of an adequate level of liquidity, including through a cushion of liquid assets and a contingency funding plan; - management of intraday liquidity risk and collateral; - public disclosure in promoting market discipline, etc. <p>Stock exchanges that are not on the approved list tend to be smaller. Limited exposure to these markets (10% maximum) will help reduce liquidity risk. Also, bonds with higher credit rating tend to be more liquid. Therefore, minimum credit rating requirement also help reduce liquidity risk.</p>
Counterparty risk	<p>Counterparty refers to the opposite party in a contract or financial transaction. Counterparty risk is the risk of any counterparty failing to fulfill its contractual obligations.</p> <p>In the MPF context, counterparties include the trustee, investment manager and guarantor (in case of guaranteed funds).</p> <p>Depending on which counterparty defaults or is in financial difficulties, an MPF scheme might be adversely affected in terms of a drop in the value of the fund or the scheme's day-to-day operation being hampered.</p>	<p>To address the counterparty risk, MPFA imposes stringent requirements on various counterparties to the MPF funds in order to minimize the possible impact if any one counterparty fails.</p> <ul style="list-style-type: none"> - MPF operators (i.e. trustees) and investment managers are required to have adequate paid-up capital to operate their business (generally HK\$150,000,000 for MPF trustee; and HK\$10,000,000 for MPF investment manager). Trustees and investment managers must also report their capital adequacy to the MPFA on a regular basis to ensure they have sufficient capital to operate under the MPFA requirement; - the MPFA will regularly inspect trustees and investment managers to ensure that the trustees and investment managers have sufficient internal controls; - only corporations that have been licensed to carry on a business in asset management under the Securities and Futures Ordinance can be appointed as MPF investment managers. They have to fulfill the licensing requirements of the Securities and Futures Commission and subject to its ongoing supervision;

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		<ul style="list-style-type: none"> - trustees are required to have adequate insurance to indemnify the scheme against any losses of scheme assets caused by misfeasance or misconduct of the trustees or their service providers; - protection of member's assets under a trust structure with physical assets under safe keeping by custodians and trustees who are required to exercise due care to look after scheme assets; - MPF fund's assets are held separately from the trustees and investment managers' own accounts to ensure that in case financial difficulties of trustees and investment managers of the MPF scheme, the fund's asset (which belongs to the investors) will not be affected; - in case of a guaranteed fund, the guarantor must be a bank or an insurance company that satisfies the capital adequacy or reserve requirements in respect of the investment guarantees imposed by the relevant authority in order to minimize the chance that the guarantor is unable to meet the guaranteed obligations; - trustee is responsible for the MPF scheme and will arrange for replacement if an investment manager or a guarantor to the MPF fund fails to ensure the MPF fund is still in operation. However, if a trustee is unable to fulfill its obligation, it is expected that the MPFA will step in and appoint a replacement trustee; - regulations, approval and monitoring processes by the regulators and scheme trustees for confirming ongoing viability of managers; - the MPF Compensation Fund established under law that trustees must contribute to, which is available in selected situations of members being adversely affected because of failures.
Credit risk	<p>It is the risk of loss due to a debtor's non-payment of a loan or interest</p> <p>In the context of MPF, loan exists in the form of debt securities, e.g. bond, as some MPF funds invest in them. There is credit risk when the issuer of certain debt securities fails to pay on time or pay at all.</p> <p>The default might adversely affect the performance of the MPF scheme in question. In other words, the fund might suffer a drop in value.</p>	<p>MPFA imposes credit rating requirements on debt securities for MPF funds to ensure that MPF funds can only invest in high credit quality instruments to minimize the credit risk. MPFA also requires that bank deposits for MPF conservative funds can only be placed in an authorized bank or financial institution which has met minimum capital requirement.</p> <p>MPF funds can be invested in debt securities:</p> <ul style="list-style-type: none"> - that are issued by an exempt authority , e.g. some governments or central banks; - where the principal and the payment of interest of which is unconditionally guaranteed by an exempt authority; or - that satisfy a minimum credit rating by the leading credit agencies (e.g. BBB for S&P and Baa2 for Moody) to ensure the debt securities invested by MPF funds are having a reasonable investment quality. The credit rating requirements are even higher for MPF conservative fund. <p>Diversification is another measure for MPF fund which ensures the fund will not be overly invested in a few securities in order to avoid "putting all eggs in one basket"</p>

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		situation. For example, a MPF fund cannot invest more than 10 percent of its net assets in the securities of an issuer. In addition, an MPF fund cannot hold more than 10 percent of the total amount debt of an issuer.
Inability to save sufficient for retirement	<p>To provide basic retirement protection, the MPF was established to create a system where the employer and employee jointly regularly contribute towards the ultimate retirement benefits of the member. As a system geared to provide funding for living a financially fulfilling and secure retirement, a key risk for individuals is reaching retirement and finding that the funds built up in the MPF are insufficient.</p> <p>The most difficult question for retirees and therefore for those saving for their future retirement is “how much money will I need for retirement?” The answer depends on a number of factors including:</p> <ul style="list-style-type: none"> - when you will retire; - your desired lifestyle and therefore your spending in retirement (including providing for or supporting others such as family members); - how long you will live; - whether you want to leave some money as an inheritance; - how you will invest your accumulated money during your retirement. <p>Once you have estimated how much you will need to have when you retire, you then need to ensure that you are saving enough and investing appropriately to achieve this goal.</p> <p>Many people make the following mistakes:</p> <ul style="list-style-type: none"> - they underestimate their retirement needs during the “drawdown phase”; - they assume - normally wrongly – that the mandatory contributions during the “accumulation phase” will be enough each month to achieve their goals; - they put off starting to save, thinking they’ll be able to catch up later in life; - they invest too conservatively not remembering the 	<p>The MPF system and the providers involved help in a variety of ways including:</p> <ul style="list-style-type: none"> - The MPF system provides basic retirement protection through mandated regular contributions from the start of our working lives; - a potentially tax effective and comparatively low cost (relative to retail funds products) means of accessing a range of investment options; - “dollar cost averaging” or in other words regular contributions getting the advantage of not risking large one-off investments at times when prices are expensive; - a range of regulator-approved investment options and investment managers to allow suitable investment choices based on individual situations; - licensed intermediaries who can guide members on budgeting and product decisions; - the ability to make voluntary contributions to allow topping up on the mandatory contributions to the level required to meet individual retirement targets; - tools and help from providers to help with budgeting for retirement, estimating the savings needs and managing MPF accounts such as calculators for members to use.

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	<p>long timeframe that they have to ride out the ups and downs of investment markets;</p> <ul style="list-style-type: none"> - rather than riding out the ups and downs and getting the best of both, they try to time markets and pick winners themselves, hence suffering the problems of being too late to get in or out. 	
Inflation risk	<p>Inflation means a steady increase in the general level of prices of goods and services, or a continual decline in the purchasing power of money.</p> <p>As inflation rises, your purchasing power is falling. For example, if the annual inflation rate is 5%, then a \$10 pack of chocolate will cost \$10.50 the following year. If your savings does not grow over the year, then you will be able to consume less with your savings or the purchasing power of the sum will be eroded.</p>	<p>MPF offers a series of fund choices with a mix of equities and bonds that are powerful in guarding against inflation risk. Equities and bonds possess certain inherent features that make them better vehicles for combating inflation.</p> <p>The value of equities increases over time with the pace of economic growth and the latter generally ties in with the trend of price increases or inflation.</p> <p>As to bonds, the yields and the shape of the yield curve in general, should reflect the expected inflation rate. In an environment of rapidly rising inflation, investment in inflation protected bonds may benefit under this scenario.</p> <p>Over the past 20 years (from 1979 to 2008), the inflation in Hong Kong has been 3.6% p.a. while the Hong Kong dollars savings rate has only been 2.9% p.a. Generally speaking, cash investments such as deposits offer the least protection against inflation risk. On the other hand, equity and bond investments, despite the possible volatility involved, offer better protection against inflation over the long run.</p> <p>It is thus not hard to realize the importance for MPF investors to consider the full range of investment choices available before deciding on the appropriate asset allocation mix.</p>
Regulatory/ Structural risk	<p>Regulatory risk is the risk associated with the potential for relevant laws (relating to the investment vehicles/schemes or their underlying investments) to change and impact the investment vehicles/schemes. Structural risk relates to the risk associated with failure of the structure of the investment vehicles/scheme itself.</p>	<p>The MPF schemes are set up under a tightly regulated environment and are governed by the laws of Hong Kong Special Administration Region. The MPFA is responsible for the regulation and supervision of the operations of provident fund schemes. To ensure scheme members' interests are adequately protected, a three-pronged approach is adopted:</p> <p><i>Stringent approval and registration criteria</i> To be qualified for registration, MPF schemes must meet prescribed standards. In addition, only companies and individuals having satisfied the stringent criteria on capital adequacy, financial soundness, fitness and properness, etc. will be approved as MPF trustees to manage registered schemes.</p> <p><i>On-going monitoring</i> Scheme assets must be kept separate from those of the participating employers, trustees and other service providers. They are kept under the safe custody of qualified custodians.</p>

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		<p>Scheme trustees have to submit returns, financial statements and internal control reports regularly to the MPFA. The MPFA also conducts field inspections, special audits and investigations, and may impose sanctions on trustees who have breached relevant requirements.</p> <p>Safety net To provide additional security and protection to scheme members, there is a "safety net" mechanism built into the MPF system. Scheme trustees have to take out adequate insurance to indemnify scheme members against losses resulting from any breach of trust or illegal conduct by MPF trustees and persons concerned with the administration of scheme assets. As a last resort, scheme members suffering from losses caused by misfeasance or illegal conduct may lodge a claim for compensation from the MPF Schemes Compensation Fund.</p> <p>In addition, there are tight investment restrictions binding all MPF investment funds available under an MPF scheme. For example:</p> <ul style="list-style-type: none"> - investments can only be made in bonds, equities, deposits, or other permissible investments as set out in the Mandatory Provident Fund Schemes Ordinance and General Regulation; - MPF equity investments are restricted to securities listed on the MPFA Approved Stock Exchanges. The Approved Stock Exchanges must meet the stringent requirements in a number of areas including their operations and organizations, risk management and liquidity, reflecting their regulatory and structural soundness; - Investments in the equities listed on non-approved stock exchanges must not exceed 10% of the total assets of an MPF fund, to be calculated with other investments permitted under the relevant section of the MPF legislation; - the total amount invested or acquired in any class of securities issued by a single issuer must not exceed 10% of the total assets of any investment fund; - no borrowing for investment purposes is allowed.
Manager risk	Under the MPF system, scheme members choose investment options from one or more appointed investment managers and sub-investment managers. In the same way that buying any product - whether financial services or other - has some "risk" attached to it, there is risk relating to the poor short and long-term investment performance of the manager relative to objectives.	<p>These risks arise in a number of areas but the system has a variety of in-built protection mechanisms for scheme members:</p> <ul style="list-style-type: none"> - the long-term nature of pension fund investment for most members means that short-term performance is less critical and should not be used to judge whether the manager is appropriate for long-term; - a competitive, commercial market with excellent disclosure of results, driving incentives for managers to perform to their objectives; - independent sources of information on manager performance; - the duties of professional and regulated trustees to oversee that managers are performing in line with their objectives and to act if they are not; - a wide range of managers for scheme trustees to choose from;

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		<ul style="list-style-type: none"> - the ability for trustees to operate schemes with a variety of funds managers so members can take advantage of diversifying manager risk; - members are free to transfer their preserved account from one service provider to another. <p>Overall the MPF system has solid governance, regulation and competition embedded into it to enhance the confidence of members that the service providers, including investment managers, will support members in achieving their retirement objectives.</p>
Market timing risk (Switching in/out Risk)	<p>Market timing is a strategy in which the investors try to identify the best times to be in the market and time to get out, typically through the use of technical indicators or economic data, and market timing risk refers to the risk taken by those who attempt to time the market. On MPF, it refers to those who attempt to switch fund frequently to capture the high and low of the market. For one thing, the potential gains from getting a market timing bet right can be enormous. However, because markets are seldom predictable, most market timers tend to only get things right once in a long while and pay huge prices when they don't. In other words, timing markets without having thoroughly analyses is nothing more than gambling.</p> <p>One of the biggest risks of market timing strategy is potentially missing the market's best-performing cycles. Missing a few important days can substantially affect portfolio returns.</p>	<p>MPF scheme members invest a regular amount in an MPF fund at regular intervals, typically monthly. Dollar-cost averaging is a prudent technique of buying a fixed amount of a particular investment on a regular schedule, regardless of unit price; thus purchasing more units when prices are low, and fewer units when prices are high. The dollar-cost averaging effect averages out the costs of units and therefore reduces the effects of short-term market fluctuation on investments. Dollar-cost averaging investments lessen the risk of investing compared to investing a large amount in a single investment at a, perhaps unfavorable, time.</p> <p>MPF investments are mostly unit trusts managed by professional investment managers. One of the most important tasks of these managers is to mitigate the portfolio risk in accordance to the market conditions so there is no need for MPF investors to duplicate the work.</p> <p>It's very difficult to be right with market timing over the long-run. For the MPF investors who don't have the time or who don't desire to monitor the market on a daily basis, there are good reasons to avoid market timing and focus on investing for the long-run. Many studies have indicated that time spent in a market is of far greater value than time spent attempting to time a market. Historically, a buy-and-hold strategy has also resulted in higher gains over the long run.</p> <p>A great way to overcome the temptation to market time is to state clearly the investors' financial conditions that may trigger asset reallocations. The best approach to an investor's portfolio is to arm oneself with all the necessary information, including both long- and short-term investment goals, financial needs and the ability to accept the risks. Individual investors should leave market timing to the experts and focus instead on their personal financial goals.</p> <p>Besides, many schemes provide mixed assets funds via which investment managers may overweight/underweight certain investment markets and/or asset classes depending on the prevailing market condition. This provides fund managers with more flexibility to manage risk and market changes.</p>

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		<p>Another way to avoid market timing risk is to invest in target-date funds, which designed to automatically get defensive over time moving investors' assets from stocks, to bonds and cash so that the portfolios become less risky as investors get older or approach to retirement age.</p>

The following table summarizes different measures help to reduce different types of risks:

	Market risk	Specific risk	Liquidity risk	Counterparty risk	Credit risk	Inability to save sufficient for retirement	Inflation risk	Regulatory/ Structural risk	Manager risk	Market timing risk
Approval and monitoring by regulators				✓				✓	✓	
Minimum credit rating requirement		✓	✓		✓			✓		
Approved exchanges requirement	✓	✓	✓					✓		
Diversification requirements, e.g. the 10% rule	✓	✓	✓		✓			✓		
Disclosure requirement		✓	✓	✓				✓	✓	
Segregation of asset				✓				✓		
Monitoring by trustee				✓					✓	
Professional indemnity insurance				✓				✓		
Compensation fund				✓				✓		
Wide range of fund products, e.g. equity funds, bond funds and funds that invest in global market	✓	✓				✓	✓		✓	✓
Long term investment and preservation requirement on accrued benefits	✓		✓			✓	✓			✓
Professional investment		✓	✓	✓					✓	✓

management and risk management										
Dollar cost averaging						✓				✓
Transfer flexibility for preserved accounts									✓	
Voluntary contribution						✓				✓

(End)