



REPORT ON THE MANAGEMENT OF  
THE GOVERNMENT'S PORTFOLIO  
FOR THE YEAR 2013/14

... taking calculated risks while investing for the long term

# 2014 HIGHLIGHTS

## **PERFORMANCE**

The annualised 20-year real rate of return for the year ended 31 March 2014 was 4.1%. In USD nominal terms, GIC achieved an annualised return of 12.4%, 7.0% and 6.5% for the five-year, 10-year and 20-year time periods respectively.

## **EXPANDING GLOBAL PRESENCE WITH A NEW OFFICE IN BRAZIL**

GIC expanded its global presence with the 10th office set up in Sao Paulo, Brazil, on 1 April 2014. We aim to broaden and deepen our network of contacts to develop investment opportunities with a local presence in Latin America.

## **NEW BOARD APPOINTMENT**

Mr S Dhanabalan joined the GIC Board on 1 August 2014. He brings with him extensive experience in finance and a strong sense of duty to invest well for Singapore's future.

## **NEW APPOINTMENT OF CHIEF OPERATING OFFICER**

Mr Goh Kok Huat was appointed Chief Operating Officer with effect from 1 April 2014. This is a new position in GIC. Mr Goh continues concurrently as President of GIC Real Estate. As Chief Operating Officer, Mr Goh's responsibilities include integrating operations to enhance GIC's investment performance.

## **RETIREMENT OF MR STEVEN GREEN FROM THE GIC INTERNATIONAL ADVISORY BOARD**

Mr Steven Green concluded his term as a member of the GIC International Advisory Board in September 2013. He had also been a Director on the Board of GIC Real Estate from July 2008 to September 2011. We thank Mr Green for his many contributions to GIC.

## **APPOINTMENTS AND RETIREMENTS OF MANAGING DIRECTORS**

Six Managing Directors retired in the 12 months since July 2013 – Mr Kent Goodwin, Mr Kunna Chinniah, Ms Ho Nyuk Chong, Mr Ng Kin Sze, Ms Pang Wai Yin and Ms Wong Wei. We are grateful for their many years of service and their valuable contributions to GIC. Six Managing Directors were appointed in July 2014 – Mr Stuart Baldwin, Ms Elizabeth Chau, Mr Kim Jun Sung, Mr Dominic Lim, Mr Loh Wai Keong and Ms Betty Tay.

REPORT ON THE MANAGEMENT OF  
THE GOVERNMENT'S PORTFOLIO  
FOR THE YEAR 2013/14

# THE GIC PRIMER

PRUDENCE

RESPECT

INTEGRITY

MERIT

EXCELLENCE

OUR RESPONSIBILITY IS TO PRESERVE AND ENHANCE SINGAPORE'S FOREIGN RESERVES. PEOPLE AND TALENT ARE CENTRAL TO WHAT WE CAN DO. WE BELIEVE THAT THE RESULTS WE SEEK ARE BEST ACHIEVED THROUGH A CULTURE FOUNDED ON OUR FIVE PRIME VALUES OF PRUDENCE, RESPECT, INTEGRITY, MERIT AND EXCELLENCE.

We exercise prudence and sound judgement and take a considered approach to managing risks as we seek to deliver sustainable, superior investment returns, always conscious of our overriding fiduciary responsibility.

As an institution and as individuals, we conduct ourselves with good sense and circumspection, even as we take the best advantage of our large asset base, global presence, multi-asset approach and long-term orientation.

All of us are united in a common endeavour, regardless of who we are, where we work or what we do. We respect people as individuals, care for their well-being, and welcome diversity in capability and background. We do not tolerate behaviour that works against the interest of our clients or of GIC.

We stress teamwork within and across departments, and with our clients and business partners. We expect everyone to be free, candid and constructive in their comments and suggestions, and always seek to help our colleagues and GIC do better.

Everything we do is founded on integrity. We expect the highest standards of honesty from everyone in GIC, both in our work and in our personal lives. This includes abiding by the laws of the countries we invest in, and observing our code of ethics in letter and in spirit.

We must never jeopardise the trust others have in us and in our reputation for professionalism.

We recruit and develop our people solely on merit. We draw our talent from around the world and provide challenging and meaningful work. We grant recognition and reward based on performance and conduct consistent with our PRIME values. We develop our people to achieve their potential so that we may also perform to our potential.

We select business partners based on their capability. We believe in long-term relationships built upon high levels of performance and quality of service.

We are relentless in our pursuit of excellence. In all that we do, we strive to be the best that we can be. This demands that we plan and anticipate well, so that we will always be in time for the future, fully able to take up the challenges and opportunities that come, pursuing improvements where they may be found, and economies where these may be gained.

We expect everyone to do his best in every situation. We harness the creativity and imagination of our people and our business partners for sustainable, superior results.

# THE GIC WAY

---

The GIC Way is a set of principles that defines the way we think and act. It sharpens our focus on our client, our commitment to people and our future. The PRIME Values acts as our compass – having a good compass enables us to get back to our fundamental purpose and beliefs, especially when we are faced with situations we have not come across before.

# CLIENTS FIRST

When our Clients do well, we do well

Never compromise our PRIME values and reputation; not even for better returns

Always follow GIC's investment principles (5Ps):

Pursue intrinsic value and maintain price discipline

Practise long-term investing

Pick our spots: be focused and leverage our strengths

Pay attention to risk control

Prepare for the future

# PEOPLE — THE KEY

Do what's right, not what's easy

Help GIC make the best decisions. Speak up if you have a different view

Attract exceptional people and develop them to their full potential

Embolden innovation and encourage learning

Reward what matters: contribution; not pedigree, age, gender or nationality

Excel in what you do; make a difference

Empower decision-making at every level

Work seamlessly across boundaries and hierarchy  
– OneGIC

# FUTURE NOW

Tomorrow is determined today

Build leadership and resources for the future

Insist on nimble and responsive structures and processes

# CONTENTS

7	OVERVIEW BY GROUP PRESIDENT & GROUP CHIEF INVESTMENT OFFICER
9	INVESTMENT REPORT
18	MANAGING THE PORTFOLIO
28	FEATURE ARTICLE: PRIVATE EQUITY
32	GOVERNANCE
61	OUR PEOPLE

# OVERVIEW

BY GROUP PRESIDENT & GROUP CHIEF INVESTMENT OFFICER

GIC has sustained steady long-term investment returns on the foreign reserves of the Singapore Government that we manage. The GIC Portfolio's 20-year annualised real rate of return for the year ended 31 March 2014 was 4.1%, compared to 4.0% for the previous year. In USD nominal terms, the GIC Portfolio generated an annualised return of 6.5% over the same 20 years. The investment performance and how it compares against our Reference Portfolio are discussed more fully in the Investment Report.

Global financial markets have been recovering strongly from the 2008/9 Global Financial Crisis, supported by low interest rates and unconventional monetary policies. Asset prices have risen strongly but the outlook for economic growth and earnings have not, thus far, improved as much. An example would be US equities which have done very well, but for which underlying earnings growth has only been modest.

As monetary policy normalises and interest rates rise, financial assets will see diminished returns. This is common to all major asset classes: public equities, private equity, bonds and real estate. Further, the current high prices in financial markets portend weaker future returns, including possibly negative returns at some point. The investment environment for the next 10 years will therefore be more challenging for global investors, including GIC.

GIC takes a long-term investment approach. We seek to invest in assets which provide sustainable returns over time. Our globally diversified portfolio provides resilience and enables us to take advantage of opportunities across many markets.

GIC implemented a new investment framework in 2013, which allocates capital to assets and investment strategies based on opportunity cost. The framework exploits GIC's unique strengths: The ability to take a long-term investment perspective; a global presence; capabilities to invest in cross-asset opportunities; a skilled and experienced team; and a governance structure that distinguishes clearly the responsibilities of the GIC Board and management. To realise the full potential of the investment framework, GIC did an organization-wide process and operations review to improve on our operating model and to build our investment capability and agility. We strive to make our operating model and systems more resilient, so that we can sustain good investment results.

GIC expanded our global presence with the inauguration of our 10th office, in Sao Paulo, Brazil, on 1 April 2014. Given a local presence in Latin America, we will be able to broaden and deepen our network of contacts to develop investment opportunities in the region.



Mr S Dhanabalan joined the GIC Board on 1 August 2014. He brings with him extensive experience in finance and a strong sense of duty to invest well for Singapore's future.

Mr Goh Kok Huat was appointed Chief Operating Officer with effect from 1 April 2014. This is a new position in GIC. Mr Goh continues concurrently as President of GIC Real Estate. As Chief Operating Officer, Mr Goh's responsibilities include integrating operations from front through mid and back office to enhance GIC's investment performance.

In September 2013, Mr Steven Green concluded his term as a member of the GIC International Advisory Board. He had been a Director on the Board of GIC Real Estate from July 2008 to September 2011. We thank Mr Green for his many contributions to GIC.

We also thank all GICians for the energy and imagination that they bring to the tasks and challenges before them. There will be more changes as we enhance operations to support our investment framework and compete in a more crowded and uncertain investment environment. GICians must continue to do what is good and right for GIC and for Singapore.



LIM SIONG GUAN  
*Group President*



LIM CHOW KIAT  
*Group Chief Investment Officer*

# INVESTMENT REPORT

## LONG-TERM INVESTMENT PERFORMANCE

GIC's mandate is to take calculated risks in order to achieve long-term returns, over an investment time horizon of 20 years. The primary metric for evaluating GIC's investment performance is the rolling 20-year real rate of return on the GIC Portfolio. The goal is expressed in real terms because GIC must, at a minimum, preserve the international purchasing power of the reserves placed under its management. Over the last 20 years, inflation has reduced the purchasing power of investors generally by about 2-3%<sup>1</sup> per year. This is why GIC seeks investments which return more than the rate of inflation.

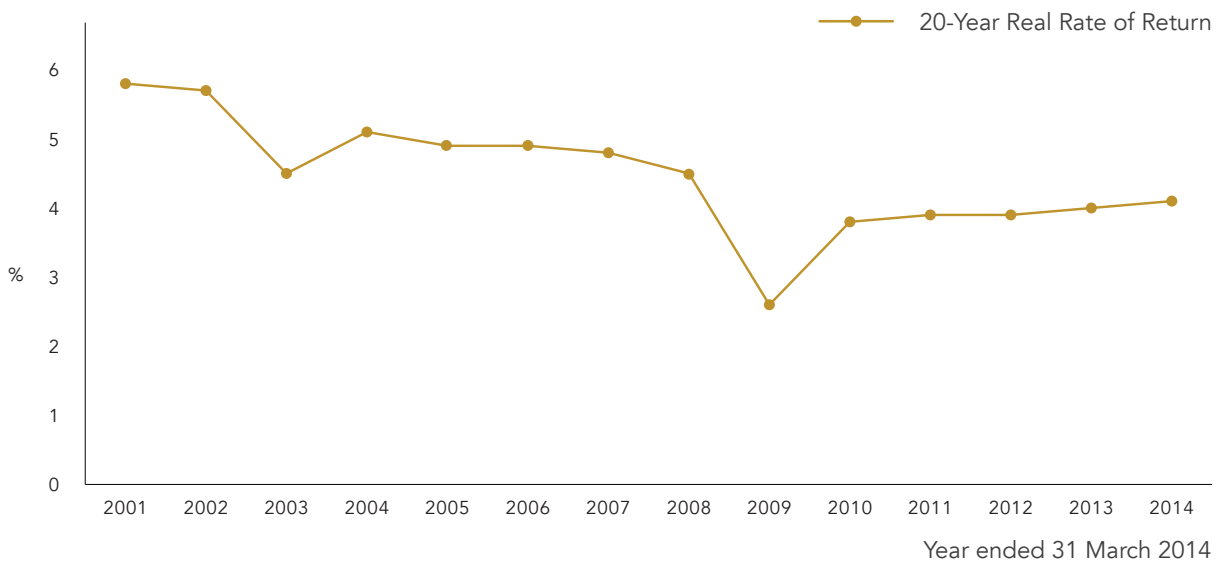
Over the 20 year-period ended 31 March 2014, the GIC Portfolio has generated an average annual real<sup>2</sup>

return of 4.1%. This long-term real return has held fairly steady over the last five years (Figure 1). Expressed in nominal USD<sup>3</sup> terms, the GIC Portfolio has generated an average annual nominal return of 6.5% over the same 20-year period. This means that US\$100 invested with GIC in 1994 would have grown to US\$352 today.

## INVESTMENT APPROACH

A long-term investment approach affords GIC advantages. First, it enables GIC to benefit from the compounding of returns. Second, it allows GIC to be contrarian in the face of short-term market sentiment. Third, GIC is able to reap long-term returns from assuming illiquidity risk. In particular, our investments in illiquid asset classes such as real estate and private equity<sup>4</sup> help improve long-term returns on the GIC Portfolio.

**Figure 1: Annualised Rolling 20-Year Real Rate of Return for the GIC Portfolio Since 2001**



<sup>1</sup> Based on advanced economies' inflation over the last 20 years from the IMF's World Economic Outlook database.

<sup>2</sup> The real return number is independent of the currency used to compute it.

<sup>3</sup> The nominal rates of return have been reported in USD terms since our 2009 report as the USD is the most common currency base for publishing global investment returns.

<sup>4</sup> Refer to this year's feature article, Private Equity.

# INVESTMENT REPORT

## EFFECTS OF COMPOUNDING OVER A LONG TERM HORIZON

Compounding is what makes money invested at a rate of return grow in value more quickly. Suppose one invests \$100 in a savings account that pays 5% nominal interest per annum. The \$100 will increase to \$265 in 20 years, and \$704 in 40 years.

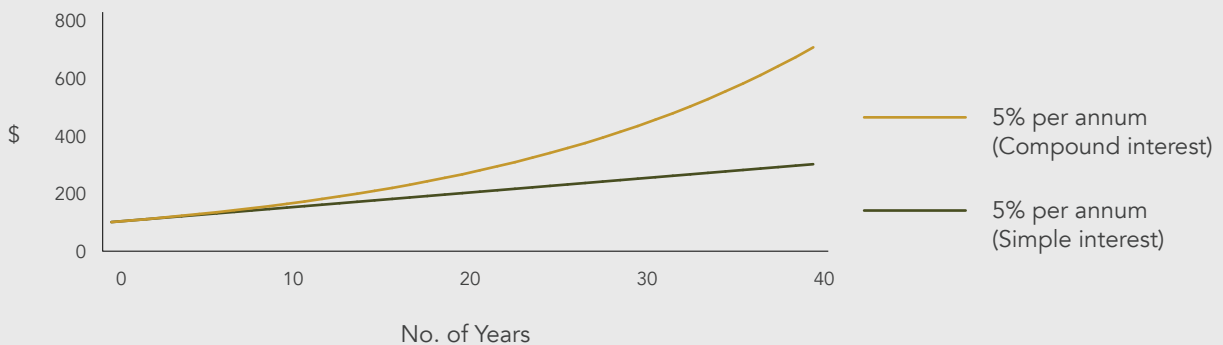
## CONTRARIAN INVESTING

One way that GIC takes a contrarian stance is through a disciplined rebalancing of the portfolio to its long-term asset mix. This involves systematically buying more of the asset which has fallen in value, and selling some of the asset which has risen in value to keep the

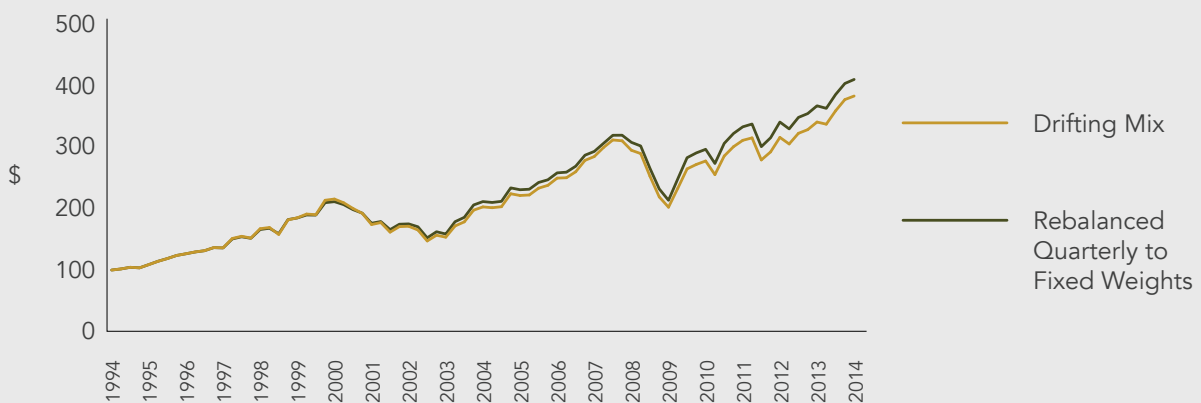
asset composition steady over time. For instance, when equities do particularly well, the rebalancing rule requires that equity holdings be cut back. Conversely, when equities perform poorly, such as after a crash, rebalancing calls for increasing holdings of the undervalued assets.

Numerous studies have shown that in the long run, a portfolio that is rebalanced regularly to its predefined target allocations tends to outperform a portfolio whose allocations are allowed to drift. As illustrated, the value of a composite 65:35 portfolio comprising global equities and bonds that is rebalanced quarterly back to the initial fixed weights would have grown by more than one that is left passively over the past 20 years.

**Effects of compounding: \$100 invested at 5% per annum**



**Growth of a drifting versus quarterly rebalanced 65:35 portfolio of global equities and bonds**



# INVESTMENT REPORT

GIC's long-term performance reflects two main factors: First, the performance of global markets; and second, its asset allocation strategy, which reflects the amount of risk that GIC takes. For a given level of risk, we strive to optimise the GIC Portfolio to achieve the best

possible long term return. Our investment approach, including the New Investment Framework that was implemented in 2013, is summarised in the box item below. It is elaborated on in the chapter on 'Managing the Portfolio'.

## EVOLUTION OF THE GIC PORTFOLIO

The GIC Portfolio has evolved significantly since inception. The increased exposure to public equities and alternative asset classes has led to a shift in our portfolio's medium- to long-term risk and return profile. This is illustrated in Figure 2, which shows returns over the last 20 years for two distinct comparator portfolios<sup>5</sup>. The 30:40:30<sup>6</sup> portfolio reflects our more conservative risk orientation initially, before we adopted a risk profile broadly similar to a 65:35<sup>7</sup> global portfolio in the last decade.

## THE NEW INVESTMENT FRAMEWORK

GIC's New Investment Framework, implemented on 1 April 2013, consists of three key components: the Reference Portfolio, Policy Portfolio and Active Portfolio.

The Reference Portfolio comprises 65% global equities and 35% global bonds, and can be thought of as a passive alternative for a large global investor such as GIC. It characterises the risk that the Government is prepared for GIC to take in its long-term investment strategies, and it frames long-term return expectations. Importantly, the Reference Portfolio is not a short-term benchmark for GIC; GIC's investment strategy is not to track the Reference Portfolio, but to build a portfolio comprising asset classes that generate good

real returns over the long term. This necessarily results in short-term deviations between the GIC Portfolio and the Reference Portfolio – and can indeed result in significant differences in performance from time to time. It is aimed at delivering better long term results.

The Policy Portfolio represents GIC's asset allocation strategy over the long term. The current Policy Portfolio comprises six core asset classes, which represent key systematic or market risks. The Policy Portfolio encapsulates the bulk of the risk and return potential of the GIC Portfolio. Realising the returns of these asset classes requires a long-term investment approach. The Policy Portfolio is hence not intended to be adjusted frequently or in response to market cycles.

The Policy Portfolio is complemented by an overlay of 'active' strategies. Assets are allocated to investment managers and strategies which seek to deliver superior returns to the Policy assets, while maintaining a similar risk profile. These investment strategies are considered 'active', as they entail actively chosen positions which differ from the Policy Portfolio. Active strategies allow GIC to add value on top of the Policy Portfolio, and to access investment opportunities which are not easily tapped via passive investment vehicles. Carrying out active strategies requires a robust investment process and skilful investment managers.

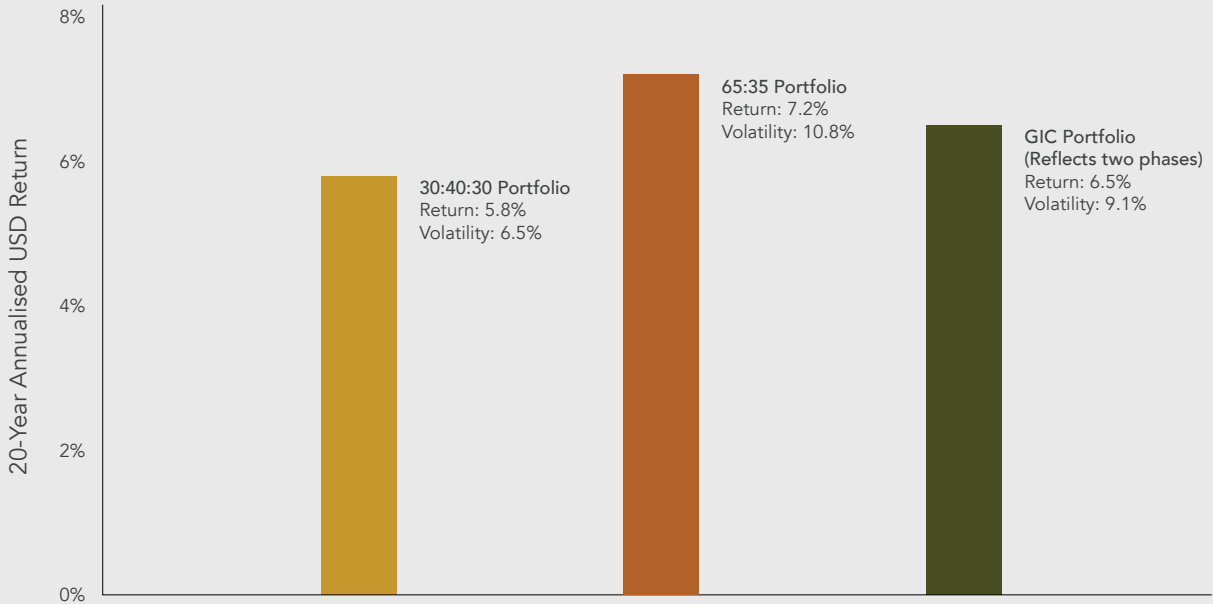
<sup>5</sup> These comparator portfolios are not GIC's benchmarks but are indicative of the broad risk-return alternatives.

<sup>6</sup> Portfolio comprises 30% global equities, 40% global bonds and 30% global cash.

<sup>7</sup> Portfolio comprises 65% global equities and 35% global bonds.

# INVESTMENT REPORT

**Figure 2: Long-term risk-return profile of GIC Portfolio versus comparator portfolios**



## REFERENCE PORTFOLIO

Passive portfolio: set at 65% global equities; 35% global bonds  
Represents Risk Level

### POLICY PORTFOLIO

Allocation among six core asset classes  
Key driver of returns over the long term  
Approved by GIC Board

+

### ACTIVE PORTFOLIO

Comprises overlay of active, skill-based strategies  
Adopted by GIC Management  
Overseen by GIC Investment Board

=

### GIC PORTFOLIO

Represents actual exposures of GIC Portfolio  
Within risk limits set by Government

# INVESTMENT REPORT

## THE GIC PORTFOLIO

GIC's returns reflect the proportions of its portfolio that are held in different asset classes, each carrying a different risk profile. Growth assets such as equities generate high returns, but also come with higher risk. Defensive assets such as sovereign bonds offer lower returns, but have lower risk and protect the portfolio from market downturns.

Figure 3 illustrates how US\$100 invested in different asset classes would have grown over 20 years from 1994 to 2014 based on market performance. It shows that equities generate higher returns – US\$100 invested in 1994 would more than quadruple to US\$423 in 2014 – but the growth trajectory is more volatile. On the other hand, cash and bonds experience more stable paths, but consequently deliver lower returns over the same span of time.

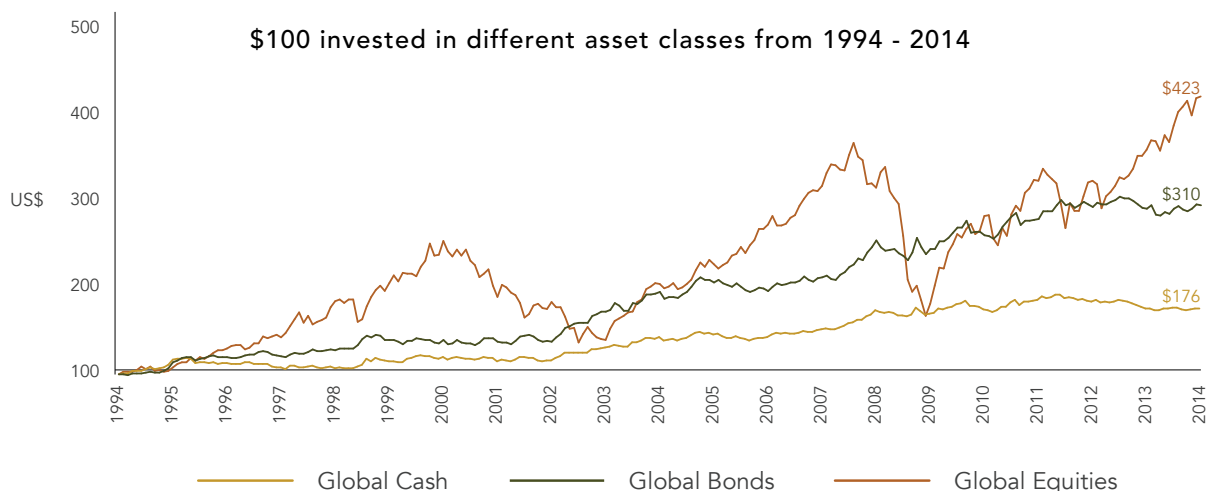
GIC constructs a diversified portfolio to benefit from the distinct characteristics of these asset classes. Figure 4 shows the asset class allocations of the GIC Portfolio. These allocations allow the GIC Portfolio to generate good long-term returns via a substantial allocation to growth assets. There is also protection from downside risk by holding defensive assets.

By construct, a diversified portfolio of multiple asset classes will underperform highly concentrated portfolios under specific market conditions. In a bull market, a concentrated portfolio of growth assets will outperform; in a bear market, a portfolio of safe assets will perform the best. Depending on market conditions, the underperformance of a diversified portfolio relative to highly concentrated portfolios may last for some time. However, across multiple economic cycles, a well-diversified portfolio provides the best mix of safety and growth. Hence, a long investment horizon is necessary in order to reap the full benefits of a well-diversified portfolio.

Table 1 and Table 2 show the asset mix and geographical distributions of the GIC Portfolio as of 31 March 2014.

Under the New Investment Framework, the GIC Portfolio is represented by six asset classes. Skill-based strategies are subsumed under these asset classes based on their risk and return characteristics. The asset mix for 31 March 2013 has been reclassified to reflect this and thus differs from what was previously presented. In addition, our investments in natural resources stocks have been categorised as developed market equities or emerging market equities depending on their geographical exposure.

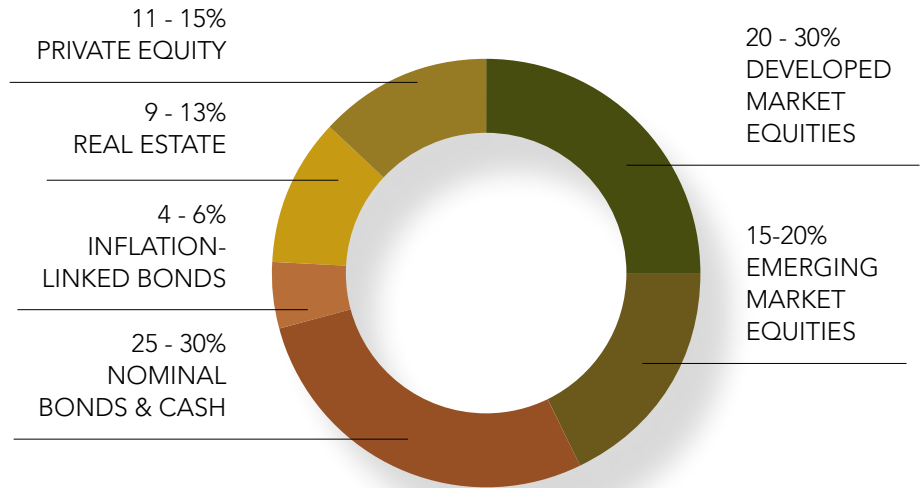
**Figure 3: Long-term nominal returns of asset classes**



# INVESTMENT REPORT

**Figure 4: Policy Portfolio with effect from 1 April 2013**

The GIC Portfolio continues to build its exposure to emerging market equities and bonds while keeping portfolio risk at around the same level. There were no major changes to the geographical exposure of GIC's investments<sup>8</sup>.



**Table 1: Asset Mix of the GIC Portfolio**

Asset Mix	31 March 2014 (%)	31 March 2013 (%)
Developed Markets Equities	29	36
Emerging Markets Equities	19	17
Nominal Bonds and Cash	31	29
Inflation-Linked Bonds	5	2
Real Estate	7	8
Private Equity	9	8
<b>Total</b>	<b>100</b>	<b>100</b>

**Table 2: Geographical Distribution of the GIC Portfolio**

Geographical Distribution		31 March 2014 (%)		31 March 2013 (%)	
<b>Americas</b>	United States	34	<b>42</b>	36	<b>44</b>
	Latin America	4		4	
	Others	4		4	
<b>Europe</b>	United Kingdom	8	<b>29</b>	8	<b>25</b>
	Eurozone	14		11	
	Others	7		6	
<b>Asia</b>	Japan	10	<b>27</b>	10	<b>28</b>
	North Asia <sup>9</sup>	14		13	
	Others	3		5	
<b>Australasia</b>		2	<b>2</b>	3	<b>3</b>
<b>Total</b>		<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

<sup>8</sup> Changes in the asset mix and geographical composition between 31 March 2013 and 31 March 2014 are driven by changes in allocation, as well as valuations.

<sup>9</sup> China, Hong Kong, South Korea and Taiwan

# INVESTMENT REPORT

## INTERMEDIATE AND LONG-TERM INVESTMENT PERFORMANCE

Table 3 shows the performance of the GIC Portfolio alongside the Reference Portfolio and looks at investment returns in the context of risk as defined by annualised volatility. As the Reference Portfolio was adopted from 1 April 2013, the historical comparison is intended for illustrative purposes.

GIC's 20-year return at 6.5% per annum in USD terms was lower than the Reference Portfolio return of 7.2%. As explained earlier, a major reason is that our asset allocation until 10 years ago had a more conservative orientation than the Reference Portfolio. GIC's lower risk profile over 20 years is indicated by the lower volatility for our portfolio at 9.1% in contrast to that for the Reference Portfolio at 10.8%.

To give a sense of on-going portfolio performance, we provide the nominal rates of return in USD terms over 5- and 10-year periods. These investment results serve as medium-term trackers of how GIC's 20-year results are evolving.

In the last decade, GIC has significantly increased its exposure to public equities and alternative asset classes while reducing its allocation to bonds.

Consequently, the GIC Portfolio returned 7.0% per annum in USD terms over the 10-year horizon. This performed slightly better than the Reference Portfolio.

Over the shorter term of five years, the GIC Portfolio returned 12.4% per annum in USD terms. This sharp recovery, from the 5-year return of 2.6% last year, was driven by global markets rebounding strongly from the lows during the Global Financial Crisis (GFC). Risk assets – in particular, public equities in the US – performed very well. Such a variation in 5-year returns from year to year is not unexpected given the volatile nature of financial markets. GIC's performance was nevertheless lower than that of the Reference Portfolio over the 5-year period. This is because the GIC Portfolio held less developed market equities, and more private market assets and emerging market equities than the Reference Portfolio. Private market assets and emerging market equities, while expected to provide good long term returns, have not done as well as developed market equities over the last five years. (See this year's feature article, which discusses our investment approach with regard to Private Equity.)

The GIC Portfolio was less volatile than the Reference Portfolio over all three time periods.

**Table 3: Performance and Volatility of the GIC Portfolio and Reference Portfolio**

Time Period	Annualised nominal return <sup>10</sup> (US\$) for period ended 31 March 2014		Annualised volatility for period ended 31 March 2014	
	GIC Portfolio	Reference Portfolio	GIC Portfolio	Reference Portfolio
5-year	12.4%	13.9%	10.1%	11.6%
10-year	7.0%	6.7%	10.2%	11.8%
20-year	6.5%	7.2%	9.1%	10.8%

<sup>10</sup> The GIC Portfolio rates of return are computed on a time-weighted basis, net of costs and fees incurred in the management of the portfolio. However, the Reference Portfolio rates of return are provided on a gross basis, i.e. without adjustment for costs and fees.



# INVESTMENT REPORT

## INVESTMENT EXPECTATIONS A CHALLENGING ENVIRONMENT

In response to the GFC of 2007 to 2009, central banks worldwide cut interest rates and utilised unconventional policies such as quantitative easing and forward guidance to provide liquidity and stimulate their economies. This has supported asset prices, resulting in strong risk asset returns since 2009.

While asset prices have risen strongly, the outlook for economic growth and earnings has not improved by as much. As a result, the yields on assets have declined. For example, the cyclically-adjusted earnings yield for US equities has fallen from 7.5% at the nadir of the GFC to 4.0% at end May 2014. Historically, there tends to be a relationship between earnings yield and the subsequent 10-year returns. The lower the earnings yield, the lower the subsequent 10-year returns tend to be. At 4.0%, the current earnings yield lies in the bottom decile of past occurrences. Subsequent returns on equities are therefore expected to be relatively weak.

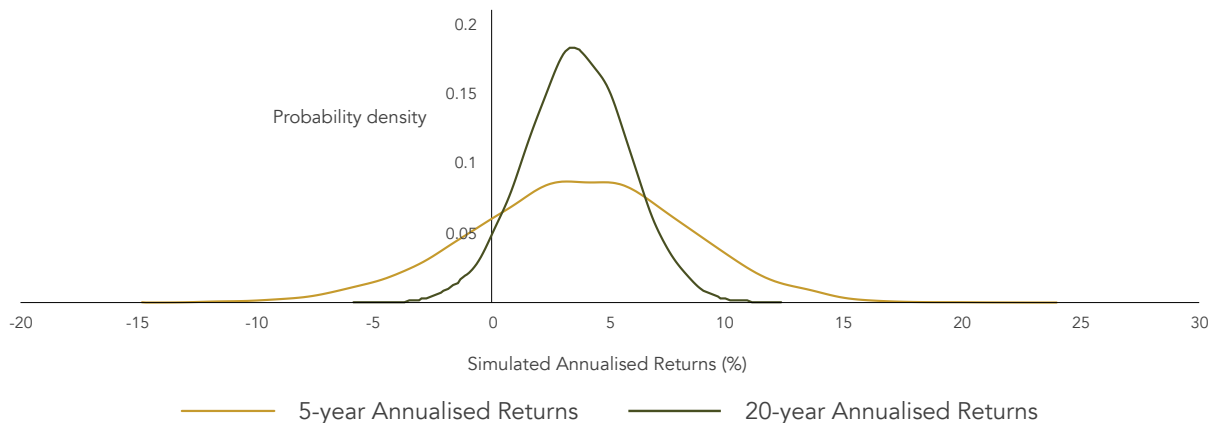
The challenge posed by low starting yields and low potential future returns is common to all major asset classes: Public equities, private equity, bonds and real estate. Further, the current high prices in financial

markets now portend weaker returns in future, including possibly negative return at some point. The investment environment for the next 10 years will therefore be more challenging for global investors, including GIC. Over a longer 20-year horizon, we expect the 20-year real return for both the GIC and the Reference Portfolio to remain modest, at around current levels.

As an indication of expected return and risk, Figure 5 shows the distribution of the simulated 5- and 20-year annualised real returns<sup>11</sup> of the Reference Portfolio. This demonstrates two essential points. First, there is a wide dispersion around the expected annualised returns over both horizons. In particular, the possibility of low and negative returns cannot be ruled out for global investors. Second, as the investment horizon increases, the probability of negative returns decreases. This is as depicted by the narrower distribution of 20-year annualised returns.

It is worth noting that while the variation in annualised returns decreases as the time horizon lengthens, the year-to-year volatility remains high. An extended investment time frame does not imply certain gains. Long-term investors have to be prepared to ride out short-term volatility to realise better returns over the long haul.

**Figure 5: Distribution of simulated 5- and 20-year annualised real returns of the Reference Portfolio**



<sup>11</sup> We use a third-party asset liability scenario (ALS) model to simulate the likelihood of a range of returns at the end of 5 and 20 years. Monte Carlo simulation with 10,000 scenarios is used to generate the portfolio's future return distribution based on historical data. While it is not predictive, it provides a sense of the portfolio's future returns over different time horizons.

# INVESTMENT REPORT

## **BUILDING A RESILIENT PORTFOLIO**

Risk is inherent in investing. While GIC cannot avoid taking market risk, it is important that the GIC Portfolio does not take on excessive risk in pursuit of investment returns. The GIC Portfolio is designed to be resilient. It seeks to achieve superior returns through diversification and portfolio construction that carefully considers the way different assets respond to possible market and economic conditions. By optimising the investment of funds across asset types, geographical regions, industries, and companies, the GIC Portfolio is more robust than the Reference Portfolio. For example, our portfolio is likely to be better diversified and less sensitive to equity market volatility because of allocations to nominal bonds, inflation-linked bonds and real estate.

Our strategy of diversification also aims to reduce concentration risk – if a single asset is not performing well, its performance will be offset by other assets which are doing better at that time. This is likely as asset returns do not move completely in tandem.

The task of diversifying has become more complex in recent times as asset classes have become more correlated. Nonetheless, we believe that having our strategically diversified asset mix puts us in good stead to benefit from changing market cycles.

Historically, the GIC Portfolio, which consisted of a more diversified mix of assets, experienced a lower drawdown compared to the Reference Portfolio during market crashes, such as during the GFC. Looking ahead, we expect the GIC Portfolio to suffer lower losses than the Reference Portfolio during stress periods<sup>12</sup>.

As the GIC Portfolio seeks to deliver good long-term real returns, its construction process is agnostic about the short-term behaviour of the Reference Portfolio. Hence, while we are confident about the long-run expected performance of the GIC Portfolio, we do not expect the GIC Portfolio to outperform the Reference Portfolio over short periods.

<sup>12</sup> This is based on the bottom decile of 5-year cumulative return of the Reference Portfolio and the GIC Portfolio using Monte Carlo simulation.

# MANAGING THE PORTFOLIO

GIC's mission is to preserve and enhance the international purchasing power of the reserves placed under our management by the Singapore Government. The aim is to achieve good long-term returns above global inflation over the investment time horizon of 20 years.

GIC's revised investment framework enables us to manage risk better, take advantage of investment opportunities in a more volatile environment, and strengthen our ability to add value.

# MANAGING THE PORTFOLIO

## INVESTMENT FRAMEWORK

GIC's mission is to preserve and enhance the international purchasing power of the reserves placed under our management by the Singapore Government. The aim is to achieve good long-term returns above global inflation over the investment time horizon of 20 years.

In response to a more challenging investment environment ahead, GIC introduced the New Investment Framework which was implemented on 1 April 2013. This revised investment framework would enable us to manage risk better, take advantage of investment opportunities in a more volatile environment, and strengthen our ability to add value. Under this framework, we make explicit distinctions among three drivers of GIC's long-term performance.

The first driver of returns is the performance of global markets. This is represented by the **Reference Portfolio**,

which reflects the Singapore Government's risk and return expectations. Second, GIC's strategy for asset allocation, which is represented by the **Policy Portfolio**, aims to achieve returns superior to the Reference Portfolio over the long term. The Policy Portfolio is approved by the GIC Board, and comprises six asset classes. Third, active investment strategies, as embodied by the **Active Portfolio**, seek to out-perform the Policy Portfolio within risk limits that are set by the GIC Board. These strategies, which are adopted by GIC management, involve selecting investment opportunities within each asset class, as well as investing in asset classes that are not contained in the Policy Portfolio and in cross-asset class strategies. As illustrated below, the investment framework clearly sets out responsibilities across GIC, from investment professionals to the Board.

In the following sections, we describe the management and governance of our portfolio in light of our investment framework.

## REFERENCE PORTFOLIO

Passive alternative portfolio: set at 65% global equities; 35% global bonds  
Represents Risk Level

### POLICY PORTFOLIO

Allocation among six core asset classes  
Key driver of returns over the long term  
Approved by GIC Board

+

### ACTIVE PORTFOLIO

Comprises overlay of active, skill-based strategies  
Adopted by GIC Management  
Overseen by GIC Investment Board

=

### GIC PORTFOLIO

Represents actual exposures of GIC Portfolio  
Within risk limits set by Government

# MANAGING THE PORTFOLIO

## REFERENCE PORTFOLIO: PASSIVE MARKET INDEX

The Reference Portfolio adopted comprises 65% global equities and 35% global bonds (65:35), a generally accepted passive alternative for a large global investor such as GIC. It is consistent with the Singapore Government's mandate for GIC, to secure a reasonable rate of return above global inflation over the long term, without taking excessive risk.

The proportion of equities versus bonds broadly determines how much of a decline in market value a portfolio could face in times of market stress: the greater the proportion of equities, the higher the decline. At the same time, the higher the proportion of bonds, the lower the projected return of the portfolio over the long term. For instance, historically, a 65:35 global portfolio experienced losses of 20% to 30% over rolling three-year periods during periods of market stress such as the Tech Bubble Crash (2001-03) and Global Financial Crisis (2008-09). However, these declines were not permanent. Over the past 50 years, the 65:35 global portfolio has managed good long-term returns despite the bouts of market stress.

That said, the Reference Portfolio is not a short-term benchmark for GIC. We can only benefit from long-term investing if we are prepared to tolerate short-term losses or underperformance relative to market indices from time to time. Rather than tracking the Reference Portfolio, GIC's investment strategy is to invest in asset classes that deliver positive returns over the long term. We may also adopt a contrarian stance when markets are at extremes. Our strategies also imply deviations from the 65:35 global portfolio in the near term.

## POLICY PORTFOLIO: KEY INVESTMENT DRIVER

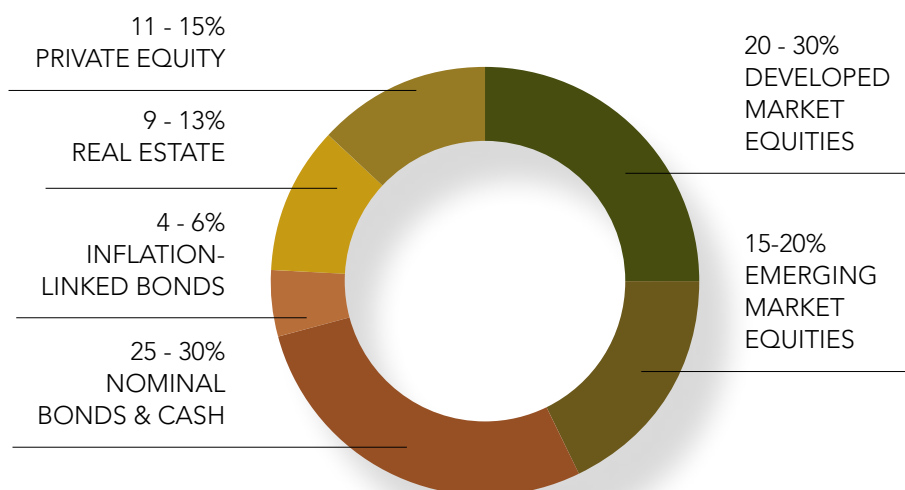
The Policy Portfolio stands at the core of the investment framework. The GIC Board approves the Policy Portfolio, taking into consideration recommendations by GIC management. The Policy Portfolio aims to achieve superior returns vis-à-vis the Reference Portfolio through diversification and careful portfolio construction that takes into account the way different asset classes respond to various economic environments.

Since 1 April 2013, the Policy Portfolio has been simplified from 13 asset classes to six core asset classes. The six asset classes are as follows: Developed Market Equities, Emerging Market Equities, Nominal Bonds and Cash, Inflation-linked Bonds, Private Equity and Real Estate. These asset classes represent the key systematic or market risks, and encapsulate the bulk of the risk and return potential of the GIC Portfolio.

The Policy Portfolio is not intended to be adjusted frequently and in particular, not in response to market cycles. However, it may be reviewed from time to time to take into account fundamental, structural changes in the global investment environment, such as a secular shift in the expected risk and return of a particular asset class or geographical region.

Adhering to a long-term Policy Portfolio enables GIC to take advantage of time-varying risk premia, and the main means by which we do this is through a disciplined rebalancing to the long-term Policy Portfolio. This involves systematically buying more of the assets that have fallen in value, and selling some of the assets that have risen in value to keep the asset mix steady over time. Numerous studies have shown that in the long run, a portfolio that is rebalanced regularly to its predefined target allocations tends to outperform a portfolio whose allocations are allowed to drift.

## MANAGING THE PORTFOLIO



### ACTIVE PORTFOLIO: COMPRISES SKILL-BASED STRATEGIES

The GIC Board approves the Policy Portfolio, taking into consideration recommendations by GIC management. It also provides the management latitude to adopt active investment strategies aimed at adding value to the Policy Portfolio. These active strategies are limited by a risk budget and stress loss limits set by the GIC Board.

This overall risk budget is allocated among the active strategies by management. However, unlike the previous approach where active strategies were restricted to the narrow confines of individual asset classes, the revised approach allows strategies to be funded by a combination of asset classes. This effectively breaks down the asset class silos.

The natural source of funding for all strategies is the sale of asset classes in the Policy Portfolio. The funding asset classes are chosen to reflect the risk characteristics to the active strategy. For example, strategies designed to outperform public equities are

funded from the corresponding public equity holdings in the Policy Portfolio. Assigning the appropriate funding asset class would be more challenging for strategies such as Credit or Infrastructure that do not have natural counterparts in the Policy Portfolio. Nevertheless, while the investments might appear different on the surface, their underlying risk and return drivers can be explained by the six core asset classes in the Policy Portfolio. For investments in credit instruments, it would be a combination of bonds and equities; for infrastructure, a combination of real estate, bonds, and equities.

In effect, an active strategy replaces a policy exposure with a value-adding strategy or investment opportunity. The sale of the funding assets represents an opportunity cost, which must be made up by the value-adding activity. To account for this appropriately, each strategy is assigned a cost of capital derived from the expected return of its funding assets plus other premia for additional risk undertaken. These skill-based active strategies must ultimately perform better than their cost of capital.

# MANAGING THE PORTFOLIO

## GOVERNANCE OF THE INVESTMENT FRAMEWORK

The investment framework clearly defines the different risk and return drivers for GIC over the long term, and further clarifies the responsibilities of the GIC Board and Management. The Reference Portfolio reflects the Singapore Government's risk appetite, while the GIC Board approves the Policy Portfolio which is expected to deliver **superior** returns vis-à-vis *the Reference Portfolio* over the long term. GIC management is given the discretion to add value within a risk budget and stress limit set by the GIC Board through the Active Portfolio which comprises active, skill-based strategies.

The Investment Board (IB) provides additional and independent oversight on GIC's active investment management and process. It comprises individuals drawn from the private sector, who collectively bring a wealth of experience in different types of investments in a range of geographies. One of the roles of the IB is to ensure that GIC invests in a sound and disciplined manner. Additionally, the IB ensures that GIC does

not take on undue headline risk in our pursuit of good investment opportunities. As a large investor, GIC will inevitably have significant positions in certain companies. Special attention will be paid to large investments that go beyond the exposures as implied by the asset class benchmarks.

The table below summarises the responsibilities within GIC under the investment framework.

The investment framework enables GIC to fund strategies based on systematic risk factors, opportunity cost and other costs of capital, instead of allocation targets. Taken as a whole, the New Investment Framework capitalises on GIC's strengths. These include the ability to take a long-term investment perspective; capabilities in public and private markets and the potential to synergise these to invest in cross-asset opportunities; presence in all major geographies; a skilled and experienced talent pool; and a governance structure that distinguishes clearly the responsibilities of the GIC Board and management.

	Responsibility
GIC Board	Approves Policy Portfolio and active risk budget
Investment Strategies Committee	Reviews GIC management's recommendations on Policy Portfolio and active risk budget
Investment Board	Oversees GIC management's active strategies
GIC Management	Recommends Policy Portfolio and constructs Active Portfolio
Investment Teams	Add value through implementation of Policy Portfolio and active strategies

# MANAGING THE PORTFOLIO

## **IMPLEMENTATION**

GIC invests in public markets, real estate and private equity in more than 40 countries.

Our long-term orientation allows us to withstand periods of significant market volatility. Our patient capital allows us to benefit from holding investments that take longer to realise their potential.

While we are open to investing in all countries outside Singapore, we do not invest in countries that are subject to United Nations Security Council sanctions. GIC exercises ownership rights in our investments to protect our financial interest.

## **PUBLIC MARKETS**

GIC invests in publicly-traded markets, including public equities in both developed and emerging markets, absolute return strategies (hedge funds), fixed income, cash and currencies. It manages a well-diversified portfolio to produce sustained, superior risk-adjusted performance.

Traditional asset class investments in equities and fixed income make up the bulk of the portfolio's investments in public markets.

## **EQUITIES**

GIC pursues both active and passive management strategies in equity investing. We have an established team of in-house research analysts and experienced portfolio managers. They conduct in-depth due diligence and research that enable us to identify undervalued stocks with the potential to generate good returns over the long term. Our investment professionals have a wide network of corporate and industry contacts with diverse insights on companies in the investment universe.

## **FIXED INCOME**

Fixed income investments aim to generate steady returns, provide a liquidity reserve to support portfolio management activities, and enhance capital preservation through diversification. Our portfolio managers employ a range of investment strategies in managing fixed income investments including yield curve analysis, credit, interest-rate duration and currency management to add value to the portfolio.

## **PRIVATE MARKETS**

Our allocation to alternative asset classes stems from their potential to generate high long-term real returns and their role to diversify the portfolio. Investments in the private markets offer higher returns to compensate for higher risk as these assets are less liquid and more difficult to trade. Real estate assets, in particular, also serve as a hedge against inflation.

GIC's long investment horizon puts us in a good position to exploit market inefficiencies through the active management of these assets.

## **REAL ESTATE**

GIC is an early entrant among institutional investors in real estate. Investments include traditional private real estate (brick-and-mortar assets), public equities (such as real estate operating companies), real estate investment trusts and real estate-related debt instruments. The real estate assets span multiple property sectors, including office, retail, residential, industrial and hospitality.

Real estate investing is governed by guidelines covering countries and regions, property asset types and sectors to ensure the portfolio meets both investment and risk objectives. Asset-specific conditions and risk are among the factors that influence investment decisions. GIC actively



# MANAGING THE PORTFOLIO

manages the assets to generate income and enhance market value through tenant management, market positioning, leasing and capital improvements. In this team-based approach, an appropriate range of real estate and capital market skills is applied to each investment.

## PRIVATE EQUITY

GIC's private equity universe includes buyouts, venture capital and special situations such as mezzanine debt, distressed debt and secondary fund investments. We invest in companies directly and through funds. The direct investment programme is focused on taking minority equity positions and providing mezzanine financing in buyouts. Our funds strategy aims to identify and invest with leading private equity and venture capital funds globally, and grow with them in the long run. We have built up a network of over 100 active fund managers.

The investment teams add value to the boards and management of the investee companies by providing advice and access to a global network of business links. Our feature article, Private Equity, elaborates on GIC's strategies for this asset class.

In Infrastructure, GIC's primary strategy is to invest directly in operating infrastructure assets with a high degree of cash flow visibility and which provide a hedge against inflation. These include mature, low-to moderate-risk assets in developed markets, complemented by investments with higher growth potential in emerging markets.

## EXTERNAL MANAGERS

GIC partners top-tier fund management institutions that offer access to opportunities, specialised capabilities, in-depth analysis and experience which complement our internal management capability.

We invest in a variety of funds including real estate funds, private equity funds, bond funds, index funds and hedge funds. In addition to the portfolios managed within GIC, we give external fund managers discretionary mandates in a wide range of asset classes such as global fixed income and global equities, while remaining fully accountable for overall performance of the portfolio. We consistently assess our external managers relative to expected returns, risks and guidelines.

## MANAGING PERFORMANCE

Managers are fully accountable for the performance of their portfolios. Their decisions must comply with prescribed guidelines and limits of their Investment Mandate. We evaluate our performance in various ways: Whether we achieve a good rate of return above global inflation for the total portfolio, how the total portfolio performs relative to the Reference Portfolio over a long horizon; how each investment professional or team performs against their cost of capital; and how our managers' results compare with those of their peers in the industry.

Our performance measurement is focused on long-term investment results, based on a disciplined and rigorous investment and risk management process.

## MANAGING RISK

The Singapore Government, as owner of the funds, determines the risk tolerance which GIC works within to achieve the investment return objective.

The ultimate outcome of an effective risk management framework is a risk-conscious culture that instils an ownership (of risk) mind-set and discipline in risk-taking. Identifying and managing risk is an integral part of management responsibility at all levels in GIC. The risk management framework sets the accountability and responsibility parameters for risk-taking. In addition to the Board and its Risk Committee, different bodies

## MANAGING THE PORTFOLIO

and groups are specifically charged with the tasks of identifying, analysing, monitoring, reporting and managing of risks. That said, identifying and managing risk is the responsibility of all GIC employees.

Our approach to risk management is three-pronged: Managing portfolio risk to ensure that risk taken is commensurate with the expected returns and consistent with our mandate; managing process and infrastructure risk so that investment decisions are implemented well; and managing people risk.

### MANAGING PORTFOLIO RISK

GIC's portfolio is managed based on the risk preferences expressed by the Singapore Government. The Policy and Active Portfolios are constructed with the Singapore Government's long-term real return objective and its primary risk reference, an ex-ante stress loss requirement, in mind.

Deviation of asset allocation exposure from policy benchmarks is constrained by GIC Board-approved operating bands and GIC Board-approved active risk budget. The operating bands around the policy portfolio's target weights are applied and monitored by the independent risk function, the Risk and Performance Management Department. GIC management is given the discretion to deviate from the policy portfolio within an approved active risk budget. A cost of capital framework is implemented to set an appropriate performance hurdle for each active strategy that includes the cost of funding these strategies and a premia for additional risk undertaken. The active risk budget is also supplemented by a set of investment guidelines to ensure that the essence of the policy portfolio is preserved and to limit concentration risk.

The Risk and Performance Management Department (RPMD) conducts regular monitoring of the strategies

to ensure adherence to the investment thesis and consistency with funding assumptions. In addition to the semi-annual review of strategies, RPMD will have regular dialogues with strategy teams to discuss risk and performance-related issues of the strategies.

RPMD independently sets and monitors performance and risk review thresholds to highlight unusually large underperformance of the portfolio. It also highlights potential changes in risk-taking behaviour and inconsistencies with the stated risk and return assumptions. Information systems are used to monitor and evaluate risk criteria, trading limits and investment guidelines within each managed portfolio. Portfolio managers and senior management obtain timely feedback on the risk profiles of their investments through performance and risk attribution tools.

A group-wide investment authorisation framework sets out the approving authorities for investments based on size, and subjects large investments to additional review by the IB. Investment teams in private market asset classes conduct extensive due diligence covering the market, physical, legal and financial aspects of the transactions, and the selection of investment partners, holding structures, and exit strategies. They manage the measurement and operational risks associated with the performance of private market assets via operational and financial controls.

Stress tests are also conducted based on a variety of scenarios to determine how potential changes in market conditions and risk events may impact the portfolio. These scenarios include a combination of both historical and forward-looking scenarios. Investment and operations teams work closely with the Legal and Compliance Department to manage legal and regulatory compliance risks arising from the

## MANAGING THE PORTFOLIO

group's investment activities. The in-house legal team also works with external lawyers to address legal risks.

### MANAGING PROCESS & INFRASTRUCTURE RISK

All investment and operations staff are required to identify, evaluate, manage and report risks in their own areas of responsibility, and to comply with established risk policies, guidelines, limits and procedures.

New investment products or strategies are subject to a risk identification and assessment process conducted by a cross-functional group, so that risks associated with the new product or activity are identified and analysed before any new investment takes place. This process includes ensuring that the required people and infrastructure, including systems, procedures and controls, are in place to manage these risks.

GIC adopts a strong control orientation in managing counterparty credit risk, trading only with financially sound and reputable counterparties. There is a stringent selection and approval process in place to appoint counterparties. We monitor our counterparty exposure against set limits and report counterparty profiles to senior management regularly. Other measures to mitigate credit risk include using netting agreements and programmes requiring counterparties to pledge collateral.

We continuously monitor for key risk indicators including late transaction processing, late report releases, stale prices and system downtime. These indicators highlight potential risk areas that need to be addressed in a timely manner in order to mitigate the risk of loss resulting from possible slippages in GIC's operations.

Infrastructure, including technology and data, plays a critical role to enable effective investment and risk

management. Policies and procedures are established to safeguard the physical security and integrity of GIC's technology and data assets.

Our business continuity plan is tested and reviewed regularly to ensure that our procedures and infrastructure can support operations in the event of a business disruption. This enhances corporate resilience and safeguards the group's operations.

Throughout the year, internal and external auditors scrutinise all operations and business processes. Any deficiencies identified must be addressed within set time frames and reported to senior management.

### MANAGING PEOPLE RISK

We require our staff to observe GIC's code of ethics, maintain exemplary conduct, and comply with laws and regulations, including prohibitions against insider trading and other unlawful market conduct.

Staff must protect confidential information and handle non-public material with due care. These guidelines are set out in our compliance manual, which is maintained by the Legal and Compliance Department. The manual also includes policies relating to the management of conflicts of interest, gifts and entertainment, personal investments, market conduct, anti-corruption and whistle-blowing, as well as disciplinary action regarding any breach.

We provide regular training to all staff to keep them current with compliance requirements. The training also helps raise the awareness of operational risk. Staff receive training on exchange regulations relevant to their responsibilities. Furthermore, appointed staff conduct briefings for all relevant personnel on data protection policies and procedures.

## MANAGING THE PORTFOLIO

Consistent with our long-term orientation, GIC's remuneration policies and practices support and reinforce a prudent risk-taking culture, as well as recognise and reward our people on the basis of

sustainable results. People are at the heart of our business. Our PRIME values are the compass in our management of people, processes and portfolios. These values are included in our staff appraisals.

## FEATURE ARTICLE

# PRIVATE EQUITY

### OVERVIEW

GIC deploys capital in areas where we can utilise our comparative advantages, in particular, a long investment horizon, global presence, as well as skilled and experienced teams. Private Equity (PE) exemplifies an asset class where we tap our advantages to reap excess returns from investments that require longer gestation periods to realise their potential.

### WHAT IS PRIVATE EQUITY

Unlike public equities, PE entails investing in equity or equity-like instruments in companies which are not traded via organized exchanges. It also includes investments in publicly traded securities through privately structured deals. PE investments provide capital to companies at all stages of their life cycle, from start-ups through to mature companies, and in a range of situations such as corporate spin-outs, management buyouts and turnarounds. Well-known companies that have been financed by PE include Google, Facebook, Dell and Hilton Hotels.

The key drivers of PE performance include:

- Strong alignment of interest between investors and company management
- Operational improvements to add value to companies
- Ability to make strategic decisions without pressure of short-term share price concerns
- Appropriate use of leverage to increase Return on Equity

### WHY GIC INVESTS IN PE

GIC's asset allocation strategy is based on a trade-off between expected return and risk, with the goal of building a diversified portfolio to deliver good overall long-term real returns. PE offers diversification benefits to GIC as its return drivers are somewhat different from those of traditional asset classes. Consequently, PE occupies a distinct and important role in GIC's portfolio.

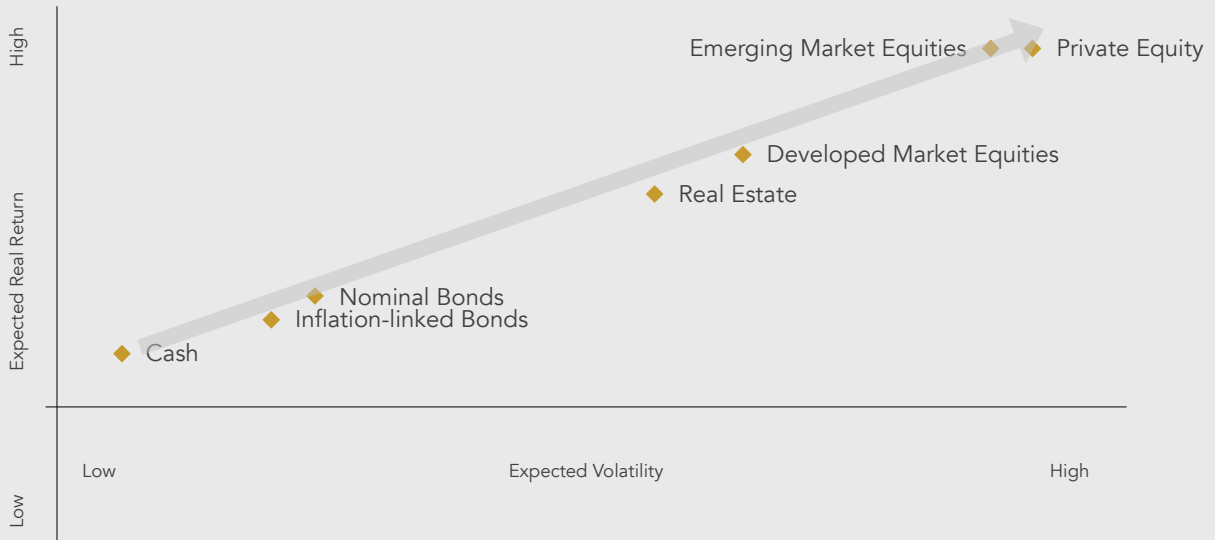
Investing in PE enables better long-term returns on our portfolio. PE offers the highest expected return, albeit with the highest risk, among the major asset classes (Chart 1). In part, this is to compensate investors for assuming illiquidity risk – the holding period of PE investments is typically three years or longer, and it is difficult to divest at short notice.

The performance of PE deals can vary greatly, as the chart on industry returns (Chart 2) shows. Similar to other asset classes, performance can be impacted by global conditions such as the 2008-2009 financial crisis, although even in challenging years some investments still do well, compensating for those that underperform. A long-term investor like GIC can afford to ride through the higher volatility of PE in return for a higher expected long-term return.

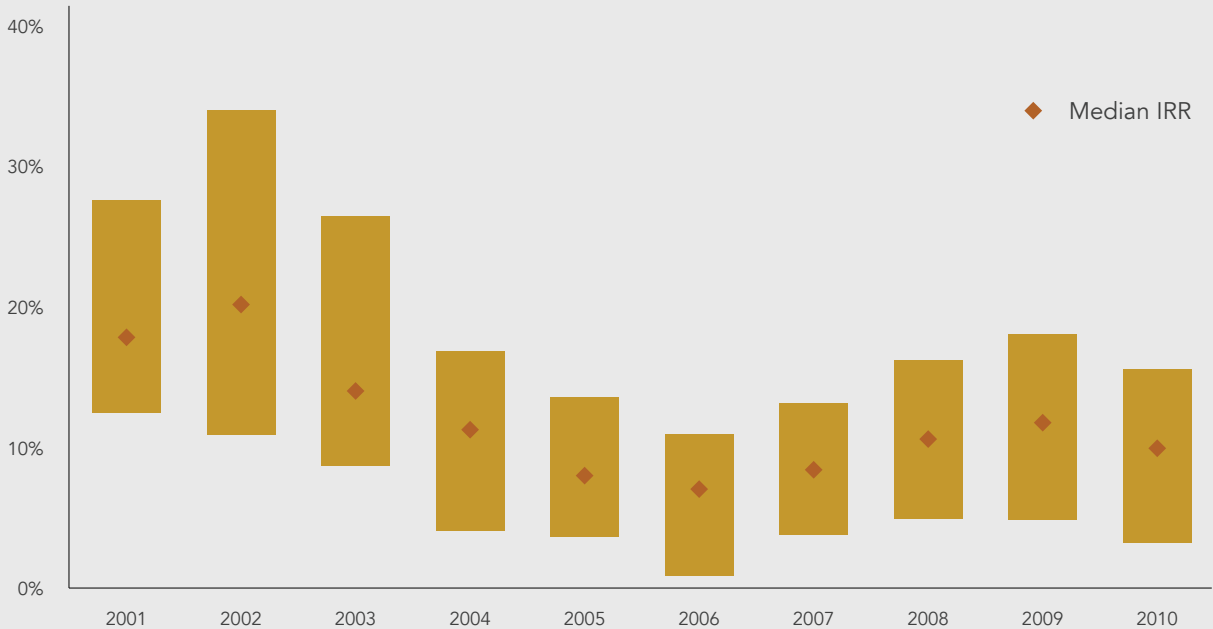
Investing in PE is therefore a higher-risk activity, but the strategy has worked well for GIC so far. Returns from the PE asset class since its introduction into the GIC Portfolio have exceeded returns from public equities.

FEATURE ARTICLE  
PRIVATE EQUITY

**Chart 1: 20-Year Expected Real Return and Volatility Assumptions of Asset Classes**



**Chart 2: Internal Rate of Return of the Private Equity Industry for the Period 2001-2010**



Top of bar represents 75th percentile  
Bottom of bar represents 25th percentile

Source: Private iQ Global PE benchmark by Burgiss  
Note: Recent years are excluded as it is too early to tell their performance

## FEATURE ARTICLE

# PRIVATE EQUITY

### HOW WE INVEST IN PRIVATE EQUITY

GIC began investing in PE in 1982, and is one of the largest and most established PE investors in the world today. While the bulk of our investments are in developed markets, particularly in North America and Europe, we have a substantial presence in emerging markets (Chart 3). Through local teams spread over seven offices on four continents, GIC has built a PE portfolio that includes investments in well-known global and local companies and PE funds.

Investments are made both indirectly via funds and directly into companies. GIC currently has over 100 active relationships with PE fund managers in all regions of the world. We invest directly in companies, either alongside our fund managers or independently, and we have investments in well over 100 companies globally. GIC's PE direct investments cut across multiple industry sectors, with a focus on financial services, business services, consumer, healthcare, technology / media / telecommunications (TMT) and natural resources (Chart 4).

Our PE investments span a wide range of sub-asset classes within the industry. The largest proportion of the portfolio is invested in buyouts, which is broadly consistent with the rest of the PE industry (Chart 5).

### GIC'S PRIVATE EQUITY INVESTMENT STRATEGY

Since returns from PE are volatile, superior returns are available only to the best PE fund managers and investors. GIC seeks top-quartile fund managers across the world to invest in

and co-invest with, and has built relationships with a number of established managers. At the same time, we have been, and continue seeding promising new funds.

While GIC works alongside knowledgeable investment partners, we have also built the capabilities to source and lead deals independently through our global network, supported by our local investment teams around the world. Having patient capital, cross-asset class capabilities, and a global presence with experienced local teams have set GIC apart from other institutional investors and helped us to gain preferred access to good investment opportunities.

We follow a robust and rigorous investment process throughout the life of our investments, from deal origination, due diligence, investment decision-making, deal execution, monitoring, through to exit.

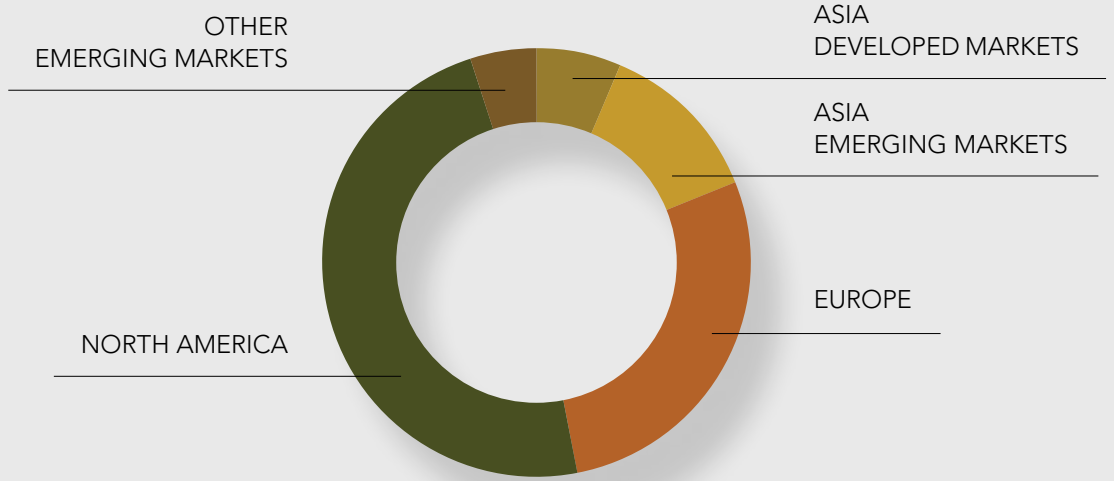
### RISK MANAGEMENT

PE investments share risks with their public market counterparts, but are also exposed to risks specific to the asset class. For instance, PE can carry high concentration and idiosyncratic risk. Investments also often involve more financial leverage. Our PE teams therefore pay close attention to risk control and exercise discipline in portfolio construction. The aim is to construct a non-cyclical portfolio that is diversified by type of investments, geographical regions, industries, as well as time (vintage year<sup>1</sup> diversification). Time-diversification is especially important to avoid pro-cyclical investing and over-exposure to periods where market valuations may be high.

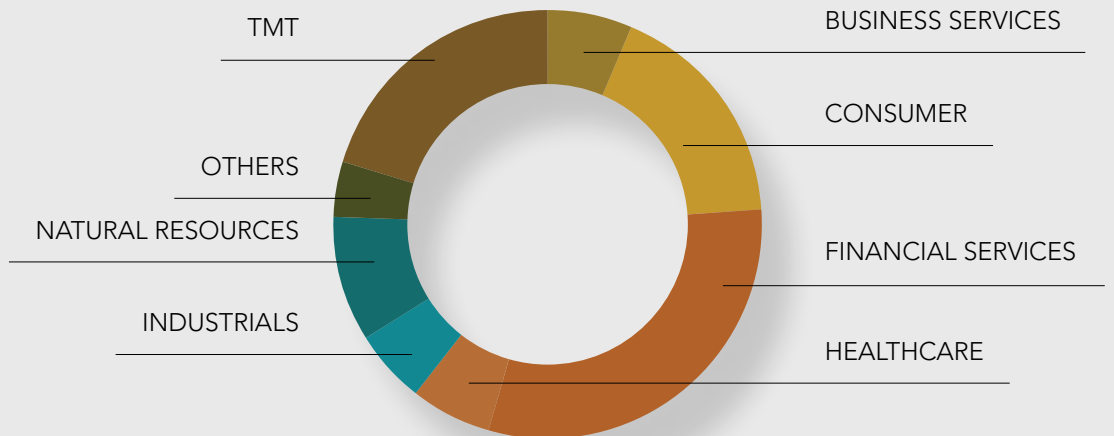
<sup>1</sup> Vintage year is the year in which an investment is made.

FEATURE ARTICLE  
PRIVATE EQUITY

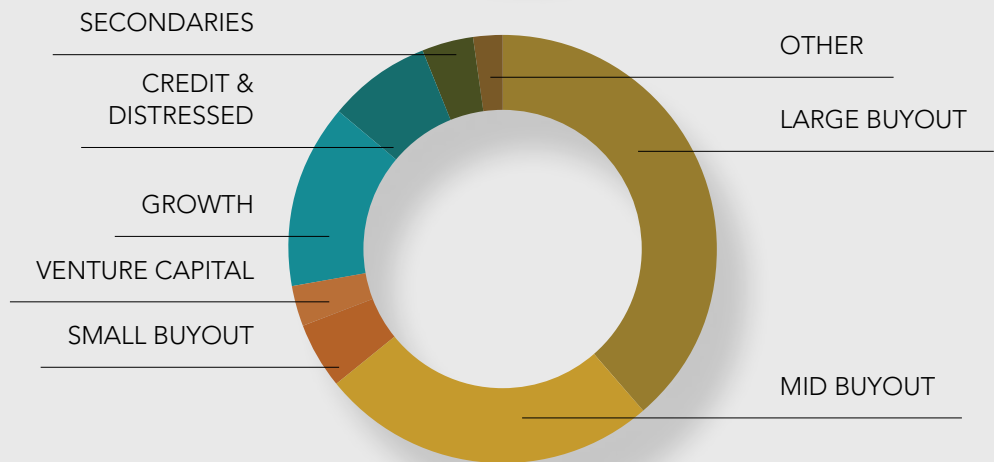
**Chart 3: Last 10 Years' Private Equity Investments by Region**



**Chart 4: Last 10 Years' Direct Investments by Sector**



**Chart 5: Last 10 Years' Private Equity Investments by Sub-Asset Class**





# GOVERNANCE

The Ministry of Finance (MOF), representing the Government, sets the investment objective, risk parameters and investment horizon for the portfolio. It ensures that a competent board of directors is in place.

The GIC Board assumes responsibility for asset allocation policy and the overall performance of the portfolio. GIC's Management is responsible for formulating and executing investment strategies and for individual investments.

The Management also reports to MOF on the risk and performance of the portfolio.

# GOVERNANCE

## INTRODUCTION

GIC was incorporated in 1981 under the Singapore Companies Act and is wholly owned by the Government of Singapore. It was set up with the sole purpose of managing Singapore's foreign reserves. GIC invests well over US\$100 billion internationally in a wide range of asset classes and instruments. As a rule, GIC invests outside Singapore.

## SOURCE AND PURPOSE OF FUNDS

GIC is a fund manager for the Government, and does not own the assets that it manages.

The sources of the Government's assets, as stated by the MOF, include proceeds from issuance of Singapore Government Securities (SGS) and Special Singapore Government Securities (SSGS), Government surpluses and proceeds from the Government's land sales. However, GIC invests the assets that the Government places with it without regard to the sources of the Government's funds. The Government does not specify to GIC the sources of assets placed with it, whether they are encumbered or unencumbered, nor their proportions. The Government's mandate to GIC is to manage assets in a single pool, on an unencumbered basis, with the aim of achieving good long-term real returns. (An explanation of the Government's framework for managing its assets and liabilities is available on the MOF's website.)

GIC's investment approach, aimed at achieving good long-term real returns, is explained in the chapter on 'Managing the Portfolio'.

The GIC Portfolio returns are tapped by the Government for its annual Budget. Under Singapore's Constitution, the Government is allowed to spend up to 50% of the long-term expected real return on the net assets managed by GIC and those owned by the

Monetary Authority of Singapore, in its annual Budget. The Government's reserves therefore provide a stream of returns that benefits present and future generations of Singaporeans.

## THE PRESIDENT OF SINGAPORE

Since 1991, the Constitution of Singapore has provided for the President of Singapore to be elected directly by Singaporeans every six years and to exercise discretionary powers to protect the reserves not accumulated by a government during its current term of office. Singapore's President is independent of the Government and must not be a member of any political party. This system aims to prevent the government of the day from spending more than what it has earned during its term of office, or drawing on past reserves, without the approval of the President.

GIC is accountable in various key areas to the President of Singapore as a Fifth Schedule company. The Constitution empowers him to obtain information to enable him to safeguard the country's reserves. No one may be appointed to or removed from the GIC Board without his concurrence. This additional layer of control ensures that the company appoints only people of integrity who are competent and who can be trusted to safeguard these assets.

## THE GOVERNMENT

An Investment Mandate from the Government to GIC sets out the terms of appointment, investment objectives, investment horizon, risk parameters and investment guidelines for managing the portfolio. In particular, this expectation on the amount of risk GIC can bear is characterised by the Reference Portfolio.

The Government, which is represented by the Ministry of Finance in its dealings with GIC, neither directs nor influences the company's decisions on individual

# GOVERNANCE

investments. It holds the GIC Board accountable for the overall portfolio performance.

GIC provides monthly and quarterly reports to the Accountant-General of Singapore. These reports list the financial transactions, as well as the holdings and bank account balances. The reports provide detailed performance and risk analytics as well as the distribution of the portfolio by asset class, country and currency. Once a year, the GIC Management formally meets the Minister for Finance and his officials to report on the risk and performance of the portfolio in the preceding financial year.

## THE AUDITOR-GENERAL OF SINGAPORE

The Auditor-General, who is appointed by the President of Singapore, submits an annual report to the President and Parliament on his audit of the Government and other bodies managing public funds.

In addition to being audited by GIC's internal audit, the main companies in the GIC group and the Government's portfolio managed by GIC are independently audited by the Auditor-General of Singapore.

Other companies in the group and the investment holding companies are audited by public accounting firms.

## THE GIC BOARD

The GIC Board is responsible for the GIC's Policy Portfolio which determines its long-term asset allocation strategy and for the overall performance of the portfolio. The Board's involvement in GIC's investment strategies pertains to decisions on the Policy Portfolio, rather than the active strategies managed by GIC Management.

The GIC's asset allocation operates within the risk constraints represented by the Reference Portfolio,

as determined by the Government in its mandate to GIC. (See chapter on 'Managing the Portfolio'.)

## BOARD COMMITTEES

The GIC Board is supported by the Investment Strategies Committee, Investment Board, Risk Committee, Audit Committee and the Human Resource and Organization Committee.

## INVESTMENT STRATEGIES COMMITTEE

The investment strategies committee reviews and critically evaluates management's recommendations on asset allocation before these are put to GIC Board for decision. The management reports to this committee on the performance of the portfolio. The committee does not decide on specific deals.

## INVESTMENT BOARD

The investment board assists the GIC Board in its oversight of GIC's investment processes and its implementation, with particular attention to large individual investments. It is not involved in the asset allocation decisions, which are the responsibility of the GIC Board.

## RISK COMMITTEE

The risk committee advises the GIC Board on risk matters and provides broad supervision on the effectiveness of risk management policies and practices. It reviews GIC's risk profile as well as significant risk issues arising from operations and investments.

## AUDIT COMMITTEE

The audit committee reviews and assesses the adequacy and effectiveness of the system of internal controls, including financial, operational and compliance controls, and risk management policies and procedures. It also supervises and evaluates the effectiveness of the internal audit function. The

# GOVERNANCE

committee reviews the integrity of the financial reporting process and other related disclosures for GIC companies, significant ethics violations, impact of changes in the regulatory and legal environment, and issues of fraud and financial losses.

## **HUMAN RESOURCE AND ORGANIZATION COMMITTEE**

The human resource and organization committee evaluates and approves GIC's compensation policies for the group and senior management, succession planning for key man appointments and oversees organizational development.

## **INTERNATIONAL ADVISORY BOARD**

The international advisory board provides the GIC Board, board committees and management with global and regional perspectives on geopolitical, economic and market developments. It provides advice and perspectives on a range of investment-related matters, in particular, global investment trends, emerging asset classes and new growth opportunities.

## **BOARDS OF ASSET MANAGEMENT COMPANIES**

All three asset management companies – GIC Asset Management, GIC Real Estate and GIC Special Investments – are wholly-owned subsidiaries responsible for investing the portfolio within the guidelines set out in the Investment Mandate to GIC. Their boards oversee investment strategies of the asset classes under management and review operations of the companies within group-wide policies.

## **GIC MANAGEMENT**

The management formulates and executes investment strategies. Once the long-term asset allocation strategy (as set out in its Policy Portfolio) is decided by the GIC Board, the management seeks to add value through

an overlay of active, skill-based strategies (i.e. Active Portfolio). The management structure is relatively flat, with clear reporting lines and accountability.

## **GROUP EXECUTIVE COMMITTEE**

The group executive committee, the highest management body in GIC, brings together the group's functional and investment heads. It deliberates on management proposals for investment and risk issues before these are submitted to the relevant board committees and the GIC Board. This committee also reviews and approves major business, governance and policy issues of significance and criticality to GIC which apply to the entire group.

## **GROUP MANAGEMENT COMMITTEE**

The group management committee oversees organizational management initiatives, business planning and personnel matters including succession planning, talent development, compensation and performance management processes. The committee is accountable to the group executive committee.

## **GROUP INVESTMENT COMMITTEE**

The group investment committee is the senior management forum responsible for the performance and risk of the total GIC Portfolio. The committee reviews and discusses investment policy decisions, and proposes appropriate recommendations to the investment strategies committee and GIC Board. The committee is accountable to the group executive committee.

## **GROUP RISK COMMITTEE**

The group risk committee is a platform that provides oversight for the risk management policies and practices for the GIC Group. The committee also acts as a forum for the chief risk officer to solicit views on the strategic risk management issues that would enable him to carry out his duties.

# GOVERNANCE

The following chart summarises the accountability of the GIC Board, International Advisory Board and board committees.

		Terms of reference
GIC Board		<p>Responsible for the GIC's Policy Portfolio which determines its long-term asset allocation strategy and for the overall performance of the portfolio.</p> <p>Does not approve individual investments which are the responsibilities of the management.</p>
International Advisory Board		<p>Provides views on market developments generally and, in particular, the medium- to long-term outlook for investment opportunities around the world.</p>
Board committees	Investment Strategies Committee	<p>Assists the GIC Board in evaluating Management's recommendations on asset allocation, and in its oversight of overall portfolio performance.</p> <p>Recommends the key drivers for GIC's return and risk outcomes.</p> <p>Does not approve individual investments.</p>
	Investment Board	<p>Assists the GIC Board in its oversight of GIC's investment process, with particular attention to large individual investments.</p>
	Risk Committee	<p>Oversees the effectiveness of risk management policies and practices in the GIC Group.</p>
	Audit Committee	<p>Looks into the effectiveness of the internal control systems for safeguarding company's assets and client's investment portfolios.</p> <p>Reviews the integrity of the financial reporting process, significant ethics violations, compliance with regulatory and legal requirements, and issues of fraud and financial losses.</p>
	Human Resource and Organization Committee	<p>Oversees organizational matters in GIC, including compensation policies, talent development, succession planning, and organizational development.</p>
GIC Management		<p>Formulates and executes investment strategies.</p> <p>Constructs Active Portfolio, with an overlay of active, skill-based strategies.</p>

# GIC BOARD AND BOARD COMMITTEES

## BOARD OF DIRECTORS

### *Chairman*

LEE HSIEN LOONG

### *Directors*

LIM HNG KIANG

TEO CHEE HEAN

THARMAN SHANMUGARATNAM

HENG SWEE KEAT

ANG KONG HUA

PETER SEAH LIM HUAT

CHEW CHOON SENG

RAYMOND LIM SIANG KEAT

HSIEH FU HUA

LOH BOON CHYE

GAUTAM BANERJEE

SUPPIAH DHANABALAN

*(appointed 1 August 2014)*

LIM SIONG GUAN

LIM CHOW KIAT

### *Senior Advisor*

LEE KUAN YEW

## INTERNATIONAL ADVISORY BOARD

### *Chairman*

LEE KUAN YEW

### *Deputy Chairman*

TEO CHEE HEAN

### *Members*

G LEONARD BAKER JR

LÉON BRESSLER

DR MARTIN L LEIBOWITZ

DEEPAK PAREKH

KNUT KJAER

NG KOK SONG

DAVID DENISON

## INVESTMENT STRATEGIES COMMITTEE

### *Chairman*

THARMAN SHANMUGARATNAM

### *Deputy Chairman*

PETER SEAH LIM HUAT

### *Members*

LIM HNG KIANG

ANG KONG HUA

HENG SWEE KEAT

S ISWARAN

### *Advisors*

DR MARTIN L LEIBOWITZ

G LEONARD BAKER JR

KNUT KJAER

NG KOK SONG

DAVID DENISON

## INVESTMENT BOARD

### *Chairman*

ANG KONG HUA

### *Members*

G LEONARD BAKER JR

LÉON BRESSLER

DAVID DENISON

HSIEH FU HUA

QUAH WEE GHEE

## RISK COMMITTEE

### *Chairman*

LIM HNG KIANG

### *Members*

SECK WAI KWONG

RAYMOND LIM SIANG KEAT

LOH BOON CHYE

### *Advisor*

DR MARTIN L LEIBOWITZ

## AUDIT COMMITTEE

### *Chairman*

CHEW CHOON SENG

### *Members*

RAYMOND LIM SIANG KEAT

LOH BOON CHYE

GAUTAM BANERJEE

## HUMAN RESOURCE AND ORGANIZATION COMMITTEE

### *Chairman*

PETER SEAH LIM HUAT

### *Members*

CHEW CHOON SENG

HSIEH FU HUA

GAUTAM BANERJEE

# GROUP COMMITTEES

## GROUP EXECUTIVE COMMITTEE

*Chairman*

LIM SIONG GUAN  
Group President

*Members*

LIM CHOW KIAT  
Group Chief Investment Officer  
LIM KEE CHONG  
Deputy Group Chief Investment Officer  
DR JEFFREY JAENSUBHAKIJ  
President, GIC Asset Management  
GOH KOK HUAT  
President, GIC Real Estate  
TAY LIM HOCK  
President, GIC Special Investments  
DR CHIA TAI TEE  
Chief Risk Officer  
DR LESLIE TEO ENG SIPP  
Director, Economics and Investment  
Strategy and Chief Economist

*Advisor*

NG KOK SONG

## GROUP MANAGEMENT COMMITTEE

*Chairman*

LIM SIONG GUAN  
Group President

*Members*

LIM CHOW KIAT  
Group Chief Investment Officer  
LIM KEE CHONG  
Deputy Group Chief Investment Officer  
DR JEFFREY JAENSUBHAKIJ  
President, GIC Asset Management  
GOH KOK HUAT  
President, GIC Real Estate  
TAY LIM HOCK  
President, GIC Special Investments  
DR CHIA TAI TEE  
Chief Risk Officer  
DR LESLIE TEO ENG SIPP  
Director, Economics and Investment  
Strategy

## GROUP INVESTMENT COMMITTEE

*Chairman*

LIM CHOW KIAT  
Group Chief Investment Officer

*Members*

LIM KEE CHONG  
Deputy Group Chief Investment Officer  
DR JEFFREY JAENSUBHAKIJ  
President, GIC Asset Management  
GOH KOK HUAT  
President, GIC Real Estate  
TAY LIM HOCK  
President, GIC Special Investments  
DR CHIA TAI TEE  
Chief Risk Officer  
DR LESLIE TEO ENG SIPP  
Director, Economics and Investment  
Strategy and Chief Economist

## GROUP RISK COMMITTEE

*Chairman*

DR CHIA TAI TEE  
Chief Risk Officer

*Members*

DOMINIC LIM KWANG WEI  
Director, Risk and Performance  
Management  
CHUA LEE MING  
General Counsel  
CHAN HOE YIN  
Director, Finance  
JOYCE TAN SIEW PHENG  
Director, Investment Operations  
ONG HIAN LEONG  
Director, Technology  
DR LESLIE TEO ENG SIPP  
Director of Economics and Investment  
Strategy and Chief Economist  
KWOK WAI KEONG  
Global Head, Asset Management, Real  
Estate  
JOHN TANG  
Global Head, Portfolio, Strategy & Risk  
Group, Special Investments  
CHOY SIEW KAI  
Head, Investment Services, Equities  
LEONG WING KWAN  
Head, Portfolio Analysis & Investment  
Services, Fixed Income

# ORGANIZATIONAL STRUCTURE

## BOARD OF DIRECTORS

### BOARD COMMITTEES

Investment Strategies Committee  
 Investment Board  
 Risk Committee  
 Audit Committee  
 Human Resource & Organization Committee

### INTERNATIONAL ADVISORY BOARD

LIM SIONG GUAN  
 Group President  
 Group Executive Committee  
 Group Management Committee

LIM CHOW KIAT  
 Group Chief Investment Officer

LIM KEE CHONG  
 Deputy Group Chief Investment Officer

GOH KOK HUAT  
 Chief Operating Officer  
 President, GIC Real Estate

### CORPORATE HEADQUARTERS

DR CHIA TAI TEE  
 Chief Risk Officer  
 Group Risk Committee

DR LESLIE TEO ENG SIPP  
 Chief Economist  
 Economics & Investment Strategy

VINCENT CHEANG WENG SENG  
 Internal Audit

DOMINIC LIM KWANG WEI  
 Risk & Performance Management

TAN CHOR HWA  
 Corporate Administration  
 & Infrastructure

DEANNA ONG AUN NEE  
 Human Resources & Organization

JOYCE TAN SIEW PHENG  
 Investment Operations

CHUA LEE MING  
 Legal & Compliance

ONG HIAN LEONG  
 Technology

CHAN HOE YIN  
 Finance

### INVESTMENT GROUPS

**PUBLIC MARKETS**  
DR JEFFREY JAENSUBHAKIJ  
 President  
 Director, Equities

TUNG SIEW HOONG  
 Fixed Income

BETTY TAY HUI CHOO  
 External Management

ELIZABETH CHAU LAI YIN  
 Treasury & Portfolio Management

DANIEL JUDGE  
 Global Trading Unit

**REAL ESTATE**  
GOH KOK HUAT  
 President

KWOK WAI KEONG  
 Asset Management (Global) &  
 Investments (Asia)

LEE KOK SUN  
 Investments (Asia)

TIA MIYAMOTO  
 Investments (Americas)

CHRISTOPHER MORRISH  
 Investments (Europe)

BERNARD PHANG SIN MIN  
 Research & Strategic Planning

**SPECIAL INVESTMENTS**  
TAY LIM HOCK  
 President

JOHN TANG  
 Portfolio, Strategy & Risk (Global)

EUGENE WONG YAU KEE  
 Funds & Co-Investments (Global)

CHOO YONG CHEEN  
 Direct Investments and  
 Funds & Co-Investments  
 (Europe)

SUZI COHEN  
 Direct Investments and  
 Funds & Co-Investments  
 (Americas)

MAVERICK WONG  
 Direct Investments (Asia)  
 Funds & Co-Investments  
 (Asia/Emerging Markets)

STUART BALDWIN  
 Infrastructure (Global)

### OVERSEAS OFFICES

ANTHONY LIM WENG KIN  
 President (Americas)

ANG ENG SENG  
 President (Europe)

LIU DONG  
 Beijing Office

KISHORE GOTETY  
 Mumbai Office

WOLFGANG SCHWERDTLE  
 Sao Paulo Office

KIM CHANG HEE  
 Seoul Office

SUN JIANJUN  
 Shanghai Office

KEN CHAN CHIEN-WEI  
 Tokyo Office



# EXECUTIVE MANAGEMENT



DR LESLIE TEO ENG SIPP  
*Director, Economics and  
Investment Strategy and  
Chief Economist*

TAY LIM HOCK  
*President  
GIC Special Investments*

GOH KOK HUAT  
*President  
GIC Real Estate*

LIM SIONG GUAN  
*Group President*

DR JEFFREY  
JAENSUBHAKIJ  
*President  
GIC Asset Management*

LIM CHOW KIAT  
*Group Chief Investment  
Officer*

LIM KEE CHONG  
*Deputy Group Chief  
Investment Officer*

DR CHIA TAI TEE  
*Chief Risk Officer*

# PROFILES

## LEE HSIEN LOONG

*Chairman*

Lee Hsien Loong has been Prime Minister of Singapore since 2004. Prior to that, he was Deputy Prime Minister with responsibilities for economic and civil service matters. He has also held ministerial appointments in Trade and Industry, Defence and Finance, and chaired the Monetary Authority of Singapore from 1998 to 2004. Before entering politics, he was a Brigadier-General in the Singapore Armed Forces. He studied at Cambridge University and the Harvard Kennedy School, Harvard University.

>



## LIM HNG KIANG

An engineering graduate of Cambridge University, Lim Hng Kiang spent nine years in the Singapore Armed Forces where he held both command and staff positions. In 1985, he earned a master's degree in Public Administration at Harvard University and returned to serve as the deputy secretary in the Defence and National Development ministries before entering politics in 1991. He held Cabinet posts in National Development, Health, Foreign Affairs, Finance and the Prime Minister's Office before his appointment as Minister for Trade and Industry in 2004.

<





**THARMAN SHANMUGARATNAM**

< Tharman Shanmugaratnam has spent his professional and political years in the fields of economic/financial policy and education. He was chief executive of the Monetary Authority of Singapore before he entered politics in 2001. He served as Minister for Education for five years, and has been Minister for Finance since December 2007. He was appointed Deputy Prime Minister in May 2011. He was also appointed Chairman of the International Monetary and Financial Committee, the policy steering committee of the IMF, in March 2011. He obtained undergraduate and masters degrees in Economics from the LSE and Cambridge University, and a masters in Public Administration at Harvard University.



**HENG SWEE KEAT**

< Mr Heng Swee Keat was appointed the Minister for Education on 21 May 2011. Prior to that, he was the managing director of the Monetary Authority of Singapore, Permanent Secretary of the Ministry of Trade and Industry, chief executive officer of the Trade Development Board and Principal Private Secretary to the then Senior Minister Lee Kuan Yew. He had also served in various positions in the Singapore Civil Service, and was awarded the Gold Medal in Public Administration and the Meritorious Medal for his contributions to the public service. Mr Heng has a master's degree in Economics from the Cambridge University and a master's degree in Public Administration from the Harvard University.

**TEO CHEE HEAN**

Teo Chee Hean, Deputy Prime Minister of Singapore since 2009, had held cabinet posts in Defence, Education, Finance, Environment and Communications, before his current appointment as the Coordinating Minister for National Security, Minister for Home Affairs, and Minister in charge of the Civil Service. He also oversees the National Population and Talent Division, and the National Climate Change Secretariat. Prior to entering politics in 1992, he was a Rear Admiral in the Singapore Armed Forces. A President's Scholar and a Singapore Armed Forces Scholar, he studied at the University of Manchester. He had a Masters in Computing Science from the Imperial College and a Masters in Public Administration from Harvard University, where he was named a Littauer Fellow.



**ANG KONG HUA**

> Mr Ang Kong Hua started his career at the Economic Development Board after graduating from the University of Hull in the UK. He joined DBS Bank at its inception in 1968 and pioneered its investment banking division. For 28 years since 1974, he was the CEO of NSL Ltd (formerly NatSteel Ltd) before retiring in 2003 and stayed as its Executive Director till 2010. He currently serves as the Chairman of Sembcorp Industries Ltd and Global Logistic Properties Limited. He was formerly Chairman of Singapore Telecommunications and Singapore Post, Vice Chairman of Neptune Orient Lines Ltd and Director of DBS Bank, CIMC Raffles Offshore (Singapore) Limited and k1 Ventures Limited.



#### PETER SEAH LIM HUAT

Chairman of DBS Group Holdings and Singapore Health Services, Peter Seah Lim Huat serves on the boards of many commercial enterprises in Singapore and overseas such as CapitaLand. A graduate of the former University of Singapore, he held several senior positions in his 24-year career with the Overseas Union Bank before retiring as its vice chairman and chief executive officer in 2001. He was president and chief executive officer of the Singapore Technologies Group from 2001 to 2004.

>



#### RAYMOND LIM SIANG KEAT

Raymond Lim is Chairman of APS Asset Management and Senior Advisor to the Swire Group. He is also a director of several companies including Hong Leong Finance, Raffles Medical Group and Insurance Australia Group. A Member of the Singapore Parliament since 2001. Mr. Lim has held various ministerial appointments in the Singapore Government including Foreign Affairs, Trade & Industry, Entrepreneurship, Finance and Transport from December 2001 to May 2011. Prior to entering politics in 2001, Mr. Lim held various senior positions in the financial industry including as a Managing Director of Temasek Holdings, Chief Executive Officer of DBS Securities and Group Chief Economist of ABN AMRO Asia Securities. Mr Lim is author of "Straight Talk - Reflections on Singapore Politics, Economy and Society."

>



#### CHEW CHOON SENG

Chew Choon Seng has been a member of the board of GIC since January 2004. Until his retirement at the end of 2010, he was the CEO of Singapore Airlines for over seven years. In January 2011, he became the Chairman of the Singapore Exchange, of which he has been director since December 2004, and was also appointed Chairman of the Singapore Tourism Board. An engineer by training, he graduated from the then University of Singapore and from Imperial College, London.

<



#### HSIEH FU HUA

Hsieh Fu Hua is Chairman of United Overseas Bank Limited, and adviser to PrimePartners Group, which he co-founded. He is also a director of Tiger Airways Holdings Limited. Active in the community, he serves on the boards of a number of non-profit organisations, chairs the National Gallery Singapore, and is President of the National Council of Social Services. From 2003 to 2009, he was CEO and a director of the Singapore Exchange. His career has been in merchant banking and capital markets in Asia. He joined Morgan Grenfell Asia Holdings in 1974, after graduating from the former University of Singapore, and rose to become its chief executive. He was also group managing director of BNP Prime Peregrine Group in Hong Kong, a joint venture Asian investment banking arm of BNP founded by PrimePartners.

<



### LOH BOON CHYE

Loh Boon Chye is deputy president for Asia Pacific and head of Asia Pacific Global Markets. Additionally, he is the country executive for Singapore and South East Asia and a member of the firm's Asia Pacific Executive Committee.

<

Before joining Bank of America Merrill Lynch in December 2012, Boon Chye spent 17 years with Deutsche Bank in Asia, where he most recently was head of the Corporate and Investment Banking division for the Asia Pacific region. Boon Chye began his career in finance as an investment officer with the Monetary Authority of Singapore in 1989. In 1992, he joined the Singapore branch of Morgan Guaranty Trust Co of New York, managing its South East Asia fixed income and derivatives business.

Boon Chye has more than 20 years of experience in the industry and has played a key role in the development of the capital markets in South East Asia, holding a number of senior advisory positions. He was the deputy president of ACI Singapore in 1999, and he was a non-independent director of the Singapore Exchange from 2004 – 2012. He was also council member at the Institute of Banking & Finance Singapore and until recently he chaired the Singapore Foreign Exchange Market Committee.

Boon Chye holds a Bachelor of Engineering degree from the National University of Singapore.



^

### S DHANABALAN

S Dhanabalan is currently a Director of GIC Private Limited (formerly known as Government of Singapore Investment Corporation); Member, Council of Presidential Advisers and Member, Presidential Council for Minority Rights.

He was Chairman of Temasek Holdings (1996 – Jul 2013), Chairman of Singapore Airlines (1996-98), Chairman, DBS Group Holdings Ltd (1999-2005) and Director, Government of Singapore Investment Corporation Private Ltd (1981- 2005).

Mr Dhanabalan started his career in the Singapore Civil Service in 1960 and later served, from 1961 – 1968, in the Economic Development Board, the government investment promotion agency. He was part of a small group that established the Development Bank of Singapore where he served from 1968–1978. He entered politics in 1976 and was a Member of Parliament from 1976 to 1996. While a Member of Parliament, he was Minister for Foreign Affairs (1980-88), Minister for National Development (1987-92) and Minister for Trade and Industry (1992-93). During this period, he was also concurrently Minister for Culture (1981-84) and Minister for Community Development (1985-86).

Mr Dhanabalan received a Bachelor of Arts with Honours in Economics from the University of Malaya, Singapore. He speaks English, Tamil, Malay and enjoys golf and reading.

### GAUTAM BANERJEE

Gautam Banerjee joined Blackstone Singapore as Senior Advisor and Chairman on 1 January 2013. On 1 May 2014, Mr Banerjee was appointed a Senior Managing Director of Blackstone and co-Chairman of the firm's Asia Operating Committee. In his new role, Mr Banerjee brings senior focus and oversight to risk, controls, and governance in Asia for the firm, across offices, businesses and functions. He continues to be a key external ambassador for the firm.

Previously, Mr Banerjee served as Executive Chairman of PricewaterhouseCoopers (PwC) Singapore for nine years until his retirement on 31 December 2012. He spent over 30 years with the firm in various leadership roles in Singapore, India and East Asia.

Mr Banerjee is a Vice Chairman of the Singapore Business Federation and sits on the boards of Singapore Airlines Limited, The Straits Trading Company Limited and Piramal Enterprises Limited. Mr Banerjee's roles in the not-for-profit sector include being a Member of the Economic Development Board, a Governing Board member of Yale-NUS College, a trustee of the Singapore Indian Development Association (SINDA) and a member of the Singapore Legal Service Commission. He was a Nominated Member of Parliament in Singapore from 2007 to 2009.

Mr Banerjee is a fellow of the Institute of Chartered Accountants in England and Wales (ICAEW) and the Institute of Singapore Chartered Accountants (ISCA). He has a Bachelor of Science (Honours) degree in Accounting and Financial Analysis from the University of Warwick.

>



## LEE KUAN YEW

Senior Advisor

Born in 1923, Lee Kuan Yew studied in Raffles Institution and Raffles College. A graduate of Fitzwilliam College, Cambridge University; and Barrister of the Middle Temple in 1950. He practised law until 1959 when he became Singapore's first Prime Minister. He served successive terms until he resigned in 1990, when he was appointed Senior Minister by Prime Minister Goh Chok Tong. He was appointed Minister Mentor by Prime Minister Lee Hsien Loong in 2004, and served in that position until May 2011. He was chairman of GIC since its inception till May 2011. He currently is Senior Advisor to the GIC.



## SECK WAI KWONG

Seck Wai Kwong joined State Street Bank on 1 Sep 2011 as its executive vice president and Head of Global Services and Global Markets, Asia Pacific. He has held senior executive positions in the Monetary Authority of Singapore, the Government of Singapore Investment Corporation, Lehman Brothers and DBS Bank. Until June 2011, he was the chief financial officer of the Singapore Exchange for eight years. A graduate from Monash University with first class honours in Economics, he has a master's degree in business administration from the Wharton School.



## S ISWARAN

Mr S Iswaran, currently the Minister in the Prime Minister's Office and Second Minister for Home Affairs and Trade & Industry, Singapore, began his political career in 1997. Prior to his current appointment in 2011, Mr Iswaran had served in both the public and private sectors including the National Trade Union Congress as Director for Special Projects; the Singapore Indian Development Association as CEO; and most recently, Temasek Holdings where he was Managing Director focusing on leveraged buy-outs and high tech/biotech investments.



## QUAH WEE GHEE

Prior to joining GIC, Quah Wee Ghee worked in IBM after graduating from the National University of Singapore. He started his career in GIC as an investment officer and became director of the fixed income department in 1996. He was also tasked with setting up the technology department in 1998. He was director of the equities department during the period 2003 to 2010 and was appointed President of GIC Asset Management in 2007 which he served till June 2011. He is also a member of the Central Provident Fund Board and the SingHealth Foundation Board.



**NG KOK SONG**

< Ng Kok Song is Chair of Global Investments at GIC and member of International Advisory Board. He was GIC's group chief investment officer until Feb 2013. He has been involved with the investment of Singapore's foreign reserves for 40 years, beginning with the Ministry of Finance (1970-1971), then the Monetary Authority of Singapore (1972-1986) and at GIC since 1986. He was the founder chairman of the Singapore International Monetary Exchange in 1983, which is now part of the Singapore Exchange. He is the founder chairman of the Wealth Management Institute, adviser to Agency France Tresor and Board member of Makena Capital.



**LÉON BRESSLER**

< Mr Bressler is a Partner at Perella Weinberg Partners and manages Perella Weinberg Real Estate funds focused on real estate and real estate related opportunities in Europe. Prior to joining Perella Weinberg Partners, Mr Bressler served as Chairman and Chief Executive Officer of Unibail from 1992 through 2006. During this tenure, Unibail became Europe's largest real estate investment trust. Mr Bressler began his career with Chase Manhattan Bank successively in Paris, New York, Stuttgart, Frankfurt and London. In 1978, he joined the Midland Bank Group to participate in the establishment of Midland Bank in France. He was Chairman of the Executive Board of Midland Bank SA from 1984 to 1989. In 1989, he joined the Lanvin Group where he was Chairman and Chief Executive of Jeanne Lanvin and Lanvin Parfums. In 1991, he joined Worms & Cie and remained a Managing Partner until 1996. Mr Bressler is a graduate of the Institut d'Etudes Politiques de Paris and has a degree in Law. He was appointed to the board of GIC Real Estate in 2007.

**G LEONARD BAKER JR**

A partner since 1973 in Sutter Hill Ventures, Silicon Valley's oldest venture capital firm, G Leonard Baker Jr is also a director of a number of early stage companies. He is a trustee of Yale University, chairs Yale's finance committee, and serves on the university's investment committee and the advisory board of the School of Management. He is a board member of the Environmental Defense Fund, serves as an advisor on the David and Lucile Packard Foundation Investment Committee, and is a former member of the Advisory Council of the Stanford Graduate School of Business.

> He is also a member of Singapore Ministry of Education's International Academic Advisory Panel, established in 1997 by MOE to advise Singapore's universities on major trends and directions in university education and research. In 2005, he was conferred the Public Service Star Award for his contributions to Singapore in the areas of education and investment management."

He was appointed to the board of GIC Special Investments in 2001.



**DR MARTIN L LEIBOWITZ**

> A managing director with Morgan Stanley Research's global strategy team, Dr Martin Leibowitz was vice chairman and chief investment officer of TIAACREF from 1995 to 2004. A graduate of the University of Chicago with a PhD from the Courant Institute of New York University, he has received wide recognition for his writings and his contribution to the financial industry. He currently serves on the investment advisory committees of the Harvard Management Corporation, Rockefeller Foundation, Carnegie Foundation, and Institute for Advanced Study. He was appointed adviser to the GIC Board Investment Committee in 2009.



## DEEPAK PAREKH

Deepak Parekh is chairman of the Housing Development Finance Corporation limited (HDFC) since 1993, having joined the organisation in 1978. HDFC is India's leading Financial Services conglomerate with presence in Banking, Asset Management, Life Insurance, General Insurance, Real Estate Venture Fund and Education Loans. He is the Non-Executive Chairman of Glaxo Smithkline Pharmaceuticals and Siemens India. He is also on the boards of Exide, Mahindra & Mahindra, Indian Hotels and international boards of DP World – UAE and Vedanta Plc.. In addition, he is also on the Advisory Boards of several Indian corporate and MNC's. He is dubbed as the unofficial crisis consultant of the Government and is a member of various high-powered Advisory Committees and Task Forces.

Some of his most important recognitions are;

- The Padma Bhushan in 2006.
- "Knight in the Order of the Legion of Honour" one of the highest distinction by the French Republic, in 2010. First International recipient of the ICAEW Outstanding Achievement Award – 2010.



## DAVID DENISON

Mr Denison has extensive experience in the financial services industry, most recently serving as President and Chief Executive Officer of the Canada Pension Plan (CPP) Investment Board from 2005 to 2012. He has held senior positions in the investment, consulting and asset management businesses in Canada, the United States and Europe.

Mr. Denison is a director of Royal Bank of Canada, BCE Inc., and is chair of the boards of Bentall Kennedy and Bridgepoint Health. He also serves on the World Bank Treasury Expert Advisory Committee and the University of Toronto Investment Advisory Committee. Mr Denison earned Bachelor degrees in mathematics and education from the University of Toronto and is a Chartered Accountant and a Fellow of the Institute of Chartered Accountants of Ontario.



## KNUT KJAER

Knut Kjaer is founding partner of Trient Asset Management and chairman of FSN Capital Partners. As Chief Executive Officer of Norges Bank Investment Management from its inception in 1997 to 2008, Kjaer was responsible for the operative management of the Norwegian Government Pension Fund and the management of Norway's foreign reserves. He served as President of RiskMetrics Group Inc from 2009 to 2010. He is a member of the Investment Committee at Stichting Pensioenfonds ABP; the International Advisory Council of China Investment Corporation and the commission that manages the Irish National Pensions Reserve Fund. Kjaer holds Masters Degrees in Economics and a degree in Political Science from the University of Oslo. He has attended the Advanced Management Program at Harvard Business School.



## LIM SIONG GUAN

Lim Siong Guan, Group President, joined GIC in 2007. He was chairman of the Economic Development Board from October 2006 to June 2009. A former head of the Singapore Civil Service, he was Permanent Secretary in the ministries of Defence, Education and Finance and the Prime Minister's Office, and led various major government agencies. He has been an adjunct professor at the Lee Kuan Yew School of Public Policy at the National University of Singapore since March 2005, instructing on leadership and change management in the public sector, and is a Senior Fellow of the Civil Service College.







**LIM CHOW KIAT**

< Lim Chow Kiat is GIC's Group Chief Investment Officer since 1 February 2013. After graduating with first class honours in Accountancy from Nanyang Technological University, Lim Chow Kiat joined GIC in 1993 as a portfolio manager. He developed GIC's investment capability in corporate bonds, and was appointed head of the fixed income, currency and commodities department and deputy president of GIC Asset Management in 2008. He was appointed president (Europe) in 2009, overseeing GIC's investments and relationships in Europe, Africa and the Middle East before his appointment as President of GIC Asset Management in July 2011.



**DR JEFFREY JAENSUBHAKIJ**

< Jeffrey Jaensubhakij was appointed President GIC Asset Management and Director of Equities on 1 April 2013. Prior his appointment, he was GIC's President, Europe since 2011 and was responsible for coordinating GIC's investment activities in Europe across public and private asset classes. Dr Jaensubhakij joined GIC in 1998 as a Senior Economist responsible for covering the US economy. He has also had asset allocation portfolio responsibilities as co-head of Asset Allocation Strategy in the Economics and Strategy Department. From 2003 to 2011, Dr Jaensubhakij was based in GIC's New York Office where he headed the Total Return Equities and the US Equities teams. Dr Jaensubhakij holds a B.A. in Economics from Cambridge University and a Ph.D. in Economics from Stanford University where his research was on foreign portfolio investment and inflation in emerging stock markets.

**LIM KEE CHONG**

Lim Kee Chong is GIC's Deputy Group Chief Investment Officer and Director of Integrated Strategies. He joined GIC in 1987. He was appointed deputy president of GIC Asset Management and the head of global equities in July 2010. He has experience managing Japan equities, European equities, global sector and global equities portfolios. He graduated with an Economics degree from University of Tokyo where he studied under a government scholarship.



**TAY LIM HOCK**

Tay Lim Hock joined GIC Special Investments in 1995, and was involved in private equity investments in Asia. He was the head of the European private equity team in London from 2000 to 2003, and took over as head of the US private equity team in 2003. He became Global Head of the Funds and Co-investment group in 2008, and was appointed deputy president of GIC Special Investments in July 2010 and President in July 2011. Prior to GIC, he worked as an aeronautical engineer with the Republic of Singapore Air Force after graduating from l'Ecole Nationale de l'Aviation Civile (ENAC) in Toulouse, France, with a Masters in aeronautical engineering. He holds an MBA from Nanyang Technological University in Singapore and has completed the Stanford Executive Program.



#### GOH KOK HUAT

Goh Kok Huat is GIC's Chief Operating Officer and President of GIC Real Estate. Previously, he heads investment management (Asia) in GIC Real Estate and was appointed its deputy president in July 2010. He joined GIC from Tishman Speyer in New York, where he was managing director of equity capital markets. Prior to that, he was with the Ascendas Group where he held various appointments including COO of the Group, CEO of Ascendas-MGM, CEO of Singapore Operations and CEO of Bangalore IT Park. He spent 10 years in the military and is an Economics graduate of Cambridge University.

>



#### DR CHIA TAI TEE

Prior to his appointment as the Chief Risk Officer, Dr Chia Tai Tee was serving as the Deputy Chief Risk Officer and Director of Risk and Performance Management since July 2010. He joined GIC in 1994 and has held various positions in economics and strategy, foreign exchange, and quantitative investments including being the Deputy Director of the investment policy and strategy. He is a member of the People's Association Investment Advisory Committee. He graduated in Economics from University of Adelaide and holds a PhD from Australian National University.



#### DR LESLIE TEO ENG SIPP

Leslie started his career as an economist at the International Monetary Fund where he held various appointments over 9 years, including Deputy Division Chief and Assistant to the Director of the Asian Department. He also spent a number of years at the Monetary Authority of Singapore working on financial market surveillance and stability issues. Leslie joined GIC as a senior investment manager in the Economics & Strategy department in 2008. He headed the Asian/Emerging Market Research & Strategy team and served as Deputy Director, before his appointment as Deputy Director of the Economics Investment Strategy department (EIS). He was appointed Chief Economist in July 2011 and Director of EIS in February 2012. Leslie is a graduate of the University of Chicago and has a PhD from the University of Rochester.

<



# OUR PEOPLE

Headquartered in Singapore, GIC is a global organization with offices in 10 cities worldwide and an international talent pool.

# OUR PEOPLE

Our values and principles determine the standards we set, and the way we lead our employees. As trustees of Singapore's reserves, we live by the values that affirm the fiduciary trust entrusted to us. We invest for the long term, a mindset that applies not only to how we manage the country's reserves but also how we perceive our people as long-term assets.

We are in the business of investing in global financial markets, a business that is challenging, competitive and in constant flux. To be successful, we strive to bring out the best in our people by building a culture of performance, accountability, learning, empowerment and engagement.

## VALUES AND PRINCIPLES

Our values, encapsulated in the acronym PRIME, are Prudence, Respect, Integrity, Merit and Excellence. We manifest these values in the way we work with one another, regardless of seniority, and how we interact with others outside. Under the GIC Way, we have 14 principles grouped under the three pillars of Clients First, People The Key and Future Now. They enunciate thought, action and behaviour which we believe will yield us sustainable performance.

## OUR GLOBAL TEAM

We have more than 1200 GICians from over 30 countries. They manage investments in more than 40 countries from our offices in 10 cities. Singapore is where we have our headquarters while our overseas offices are located in: Beijing, London, Mumbai, New York, Sao Paulo, San Francisco, Seoul, Shanghai and Tokyo. The largest group of investment professionals is Singaporeans, complemented by talent from markets we invest in. Regardless of role or location, we are OneGIC, a team engaged in the common pursuit of successfully investing Singapore's reserves.

## LEADERSHIP CHANGES

GIC has in place leadership development programmes which identify and develop capable leaders across the organization for the future. We recognise the need for a continuing flow of people who are highly capable and deeply committed to the sustained performance of the company. Six Managing Directors were appointed in July 2014 – Mr Stuart Baldwin, Ms Elizabeth Chau, Mr Kim Jun Sung, Mr Dominic Lim, Mr Loh Wai Keong and Ms Betty Tay.

Managing Directors Mr Kent Goodwin, Mr Kunna Chinniah, Ms Ho Nyuk Chong, Mr Ng Kin Sze, Ms Pang Wai Yin and Ms Wong Wei retired from GIC between September 2013 and June 2014. We are deeply grateful for their many years of loyal service and their significant and valuable contributions to GIC.

## RECRUITING TALENT

We invest globally and our people operate across multiple geographies, different cultures and diverse investment sectors. We invite applications from around the globe and from diverse academic backgrounds. We are highly selective in whom we finally recruit. We seek talented individuals who have the drive and energy to excel, the readiness to innovate and learn, the analytical ability and resourcefulness to sustain high performance, and the desire to be team players sharing the corporate mission. Above all, they must have a deep resonance with our PRIME values and The GIC Way.

The GIC Professionals Programme (GPP) recruits recent graduates from around the world for a high-intensity training programme which includes a "boot camp" on the fundamentals of investing, rotations to various functional areas in GIC, and mentoring by experienced GIC professionals. Graduates of the GPP will be deployed to a business area which prepares them for a career in GIC.

## OUR PEOPLE

We offer internships to promising undergraduates and postgraduate students to provide practical insights to the fund management business, and to consider a career with GIC, post graduation.

Besides our entry level programmes, GIC also recruits seasoned professionals who are experts in their fields of specialisation. The bar for such entrants is high as we see them as leaders and self-starters who will either perceptibly add value to existing business areas or embark on new ones for us. Not only that, we look to them to be teachers and mentors to their younger colleagues.

### REWARDING AND DEVELOPING OUR PEOPLE

GIC strives to attract and retain talent to formulate and execute its investment strategies globally. We ensure rewards are aligned with performance and contribution and so adopt a long-term perspective based on performance sustained over a period rather than short-term results. We also assess individuals on conduct, teamwork and values as it is critical that actions and behaviours are consistent with our values and principles.

As the fund management business is dynamic, we give our people continuous and relevant learning opportunities so that they stay ahead of market trends and investment practices. The GIC School is the hub for our learning and development activities. It works together with our staff to identify training needs and collaborates with internal and external partners to provide learning solutions. One of these is a set of Foundation Programmes, one for every grade level, to ensure that all in GIC are clear about the expectations, responsibilities and challenges of their grades and the competencies required. The School helps to institutionalise the knowledge and experience of our people by having in-house subject matter experts

deliver practitioner-led workshops on investment and management topics.

As a large global fund manager investing across asset classes, we offer exceptional training opportunities through attachments with fund managers, postings to overseas offices and rotations to different parts of the business. Our leaders and supervisors take an active role in developing staff through leading learning communities, as well as facilitating workshops and internal case studies. In recognition of the importance of a holistic approach to employee engagement and development, we actively promote staff health and well-being.

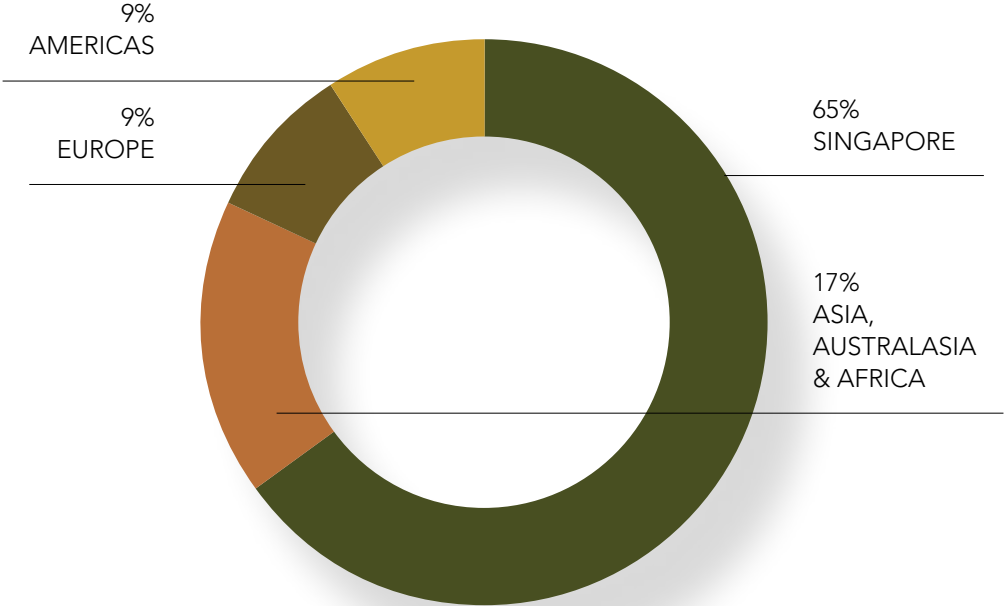
### TO EMPOWER AND ENGAGE

We believe a culture of enterprise and innovation is critical for our business success. We empower our people to express their creativity in ways that will benefit GIC through an umbrella programme, ACE, which stands for Agile, Creative and Enterprising. ACE covers initiatives to harness the energy and imagination of our people.

We believe in communicating promptly and openly with our people as we value their feedback and views. Through an array of platforms, we reach out to staff, on a company-wide basis, on important organizational developments, as well as through smaller, specific groups on operational matters.

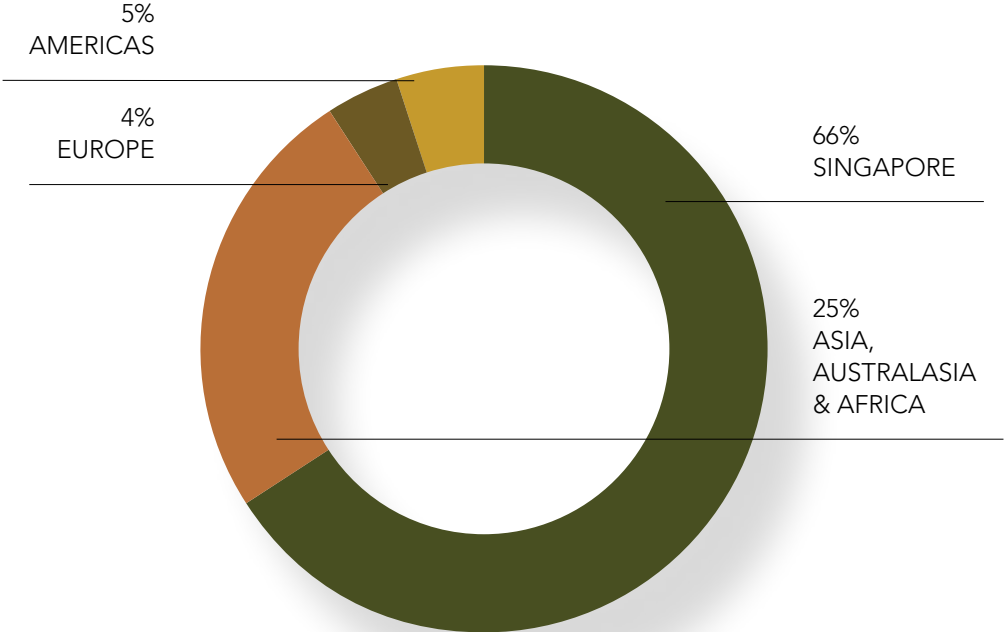
# WHERE OUR EMPLOYEES COME FROM

31 MARCH 2014



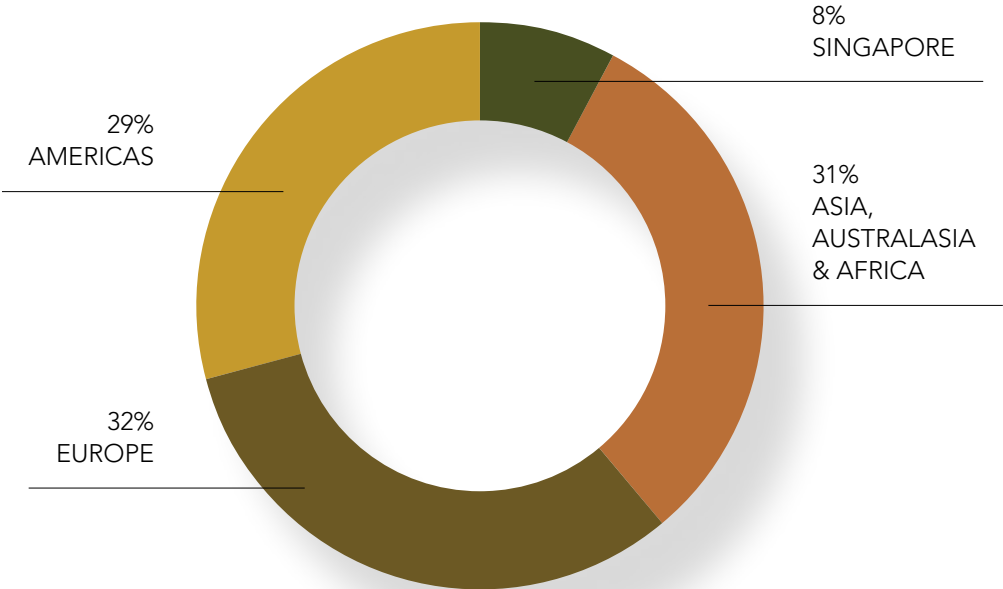
# WHERE OUR INVESTMENT PROFESSIONALS IN SINGAPORE (HEADQUARTERS) COME FROM

31 MARCH 2014



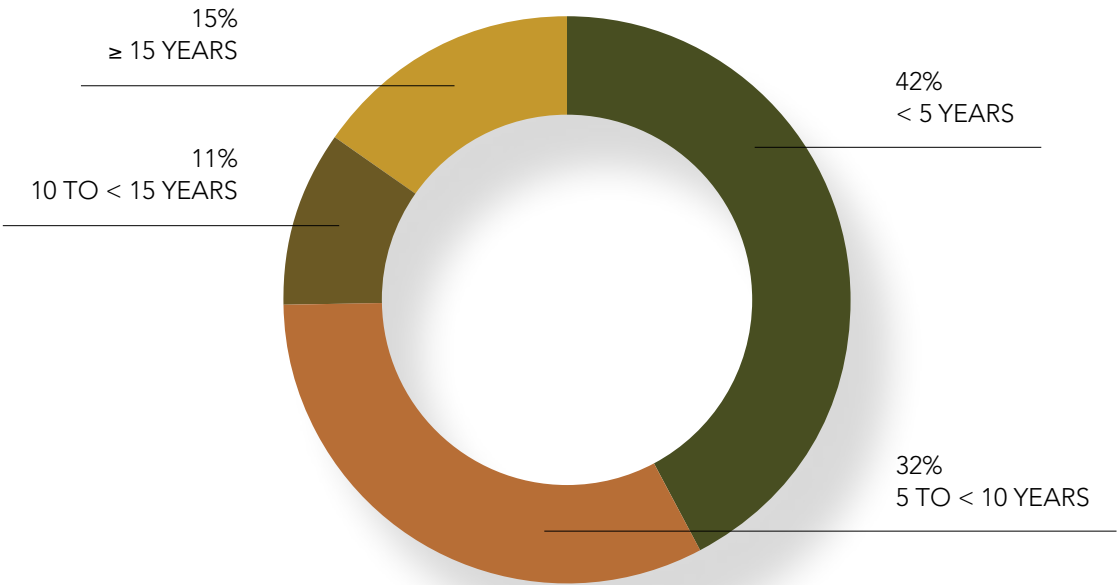
# WHERE OUR INVESTMENT PROFESSIONALS IN OTHER OFFICES COME FROM

31 MARCH 2014

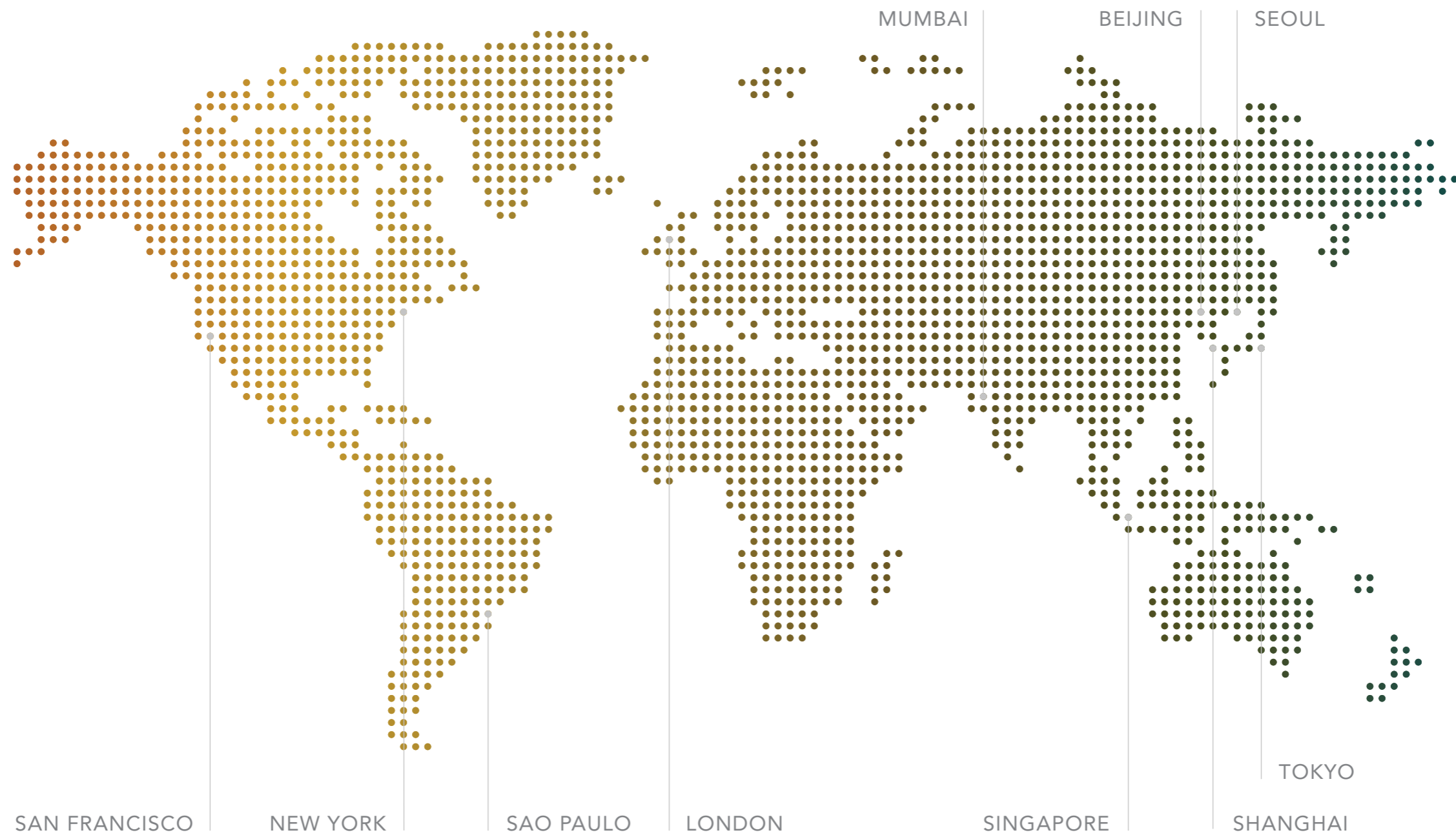


# YEARS IN GIC

31 MARCH 2014



# OUR OFFICES





**GIC PRIVATE LIMITED**

168 Robinson Road #37-01 Capital Tower Singapore 068912  
Tel: +65 6889 8888 Fax: +65 6889 8722 Website: [www.gic.com.sg](http://www.gic.com.sg)