2010 Annual Investment Report

Workers' Compensation Board – Alberta

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2010 Summary

• WCB-Alberta's investment portfolio earned a 10.2% rate of return.

• The year started with strong capital market returns before being interrupted mid-year by government debt level concerns in several European countries. In August, further economic stimulus actions were announced by the U.S. Federal Reserve, which started a strong rally in risk assets that carried through to the end of the year.

• The 2010 rate of return was 1.1% above the policy benchmark portfolio of 9.1% and 0.3% below the benchmark of 2.6% for the four-year period from 2007-10. The above benchmark performance for the year was due to strong performance from active managers in bonds and equities.

• Looking forward, the global economy appears to be recovering. Central banks are maintaining aggressive policies and corporate profits have been growing. This environment is positive for equities and corporate bonds. The cautiously optimistic outlook is tempered by considerable uncertainty and concern over the size of government deficits and accumulated debt, the unintended consequences of extreme monetary policy actions, and rising risks of higher inflation.

Introduction

Prudent management of WCB-Alberta's investment portfolio ensures sound stewardship of the assets required to pay the future costs of existing claims and the continued financial stability of the workers' compensation system in the province. Investments put premium revenue to work before it is needed to cover future costs from current year claims. Investment assets are required to earn a rate of return at or above the actuarial required rate in order for there to be sufficient funds to pay future benefits.

The Board of Directors approves the Investment Policy and Investment Management Strategic Plan. These two documents guide WCB's investment management approach. Internal investment professionals and contracted external investment management firms manage the portfolio. The Finance Committee of the Board of Directors has the important role of ongoing oversight and evaluation of the portfolio's performance.

Capital Market Overview

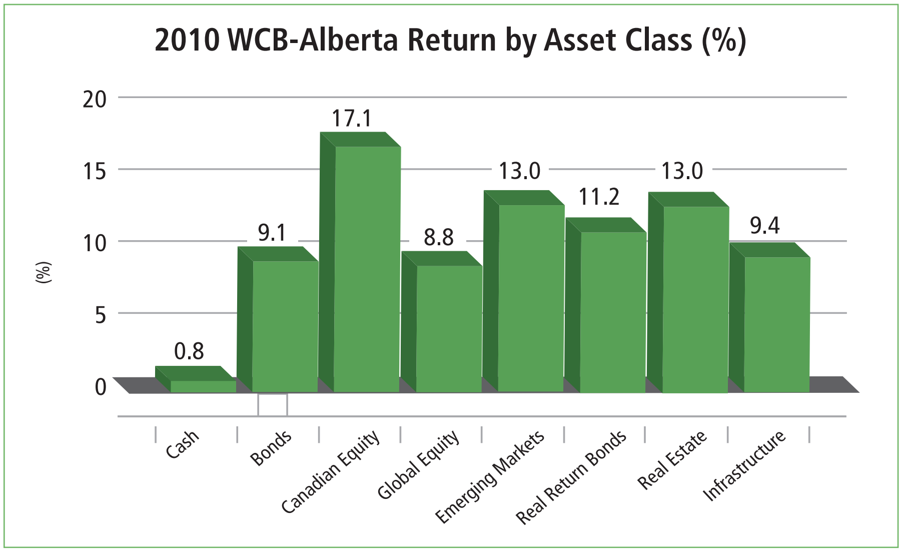
In 2010, the global economy began to gain traction in its recovery from the deep recession of 2008 and 2009. There was, however, a large divergence between developed and emerging economies in the strength of the recovery. Emerging economies in Asia and Latin America recovered very strongly while Europe and North America continued with slow and intermittent growth.

Equity markets started the year strong but were interrupted in the second quarter by government debt problems in Europe, specifically within Greece and Ireland. As the summer passed, the biggest event of the year was an announcement by the U.S. Federal Reserve that it would resume a program of purchasing U.S. government bonds. This program, referred to as quantitative easing, became widely referred to as QE2. It was specifically aimed at keeping interest rates low and pushing up prices for equities and other financial assets. The Federal Reserve was successful. From the date of its announcement in August to Dec. 31, 2010, U.S. equities posted a return of 10.4%.

An increased focus on yield by retail and institutional investors resulted in strong returns and access to new capital in market sectors that provide strong cash flows back to investors. This included corporate bonds, high dividend equities, and real estate investment trusts (REITs). Canadian REITs, as benefactors of the renewed attraction to yield, raised $5.6 billion in new capital in 2010, which compares to a long-term average of $2 billion. The Canadian REITs earned a rate of return of 24.2% for the year.

Most commodity prices were up sharply in 2010, as demand from rapidly growing emerging economies pushed up prices for metals, energy and agricultural commodities. This fuelled concerns about inflation, food shortages and potential social unrest.

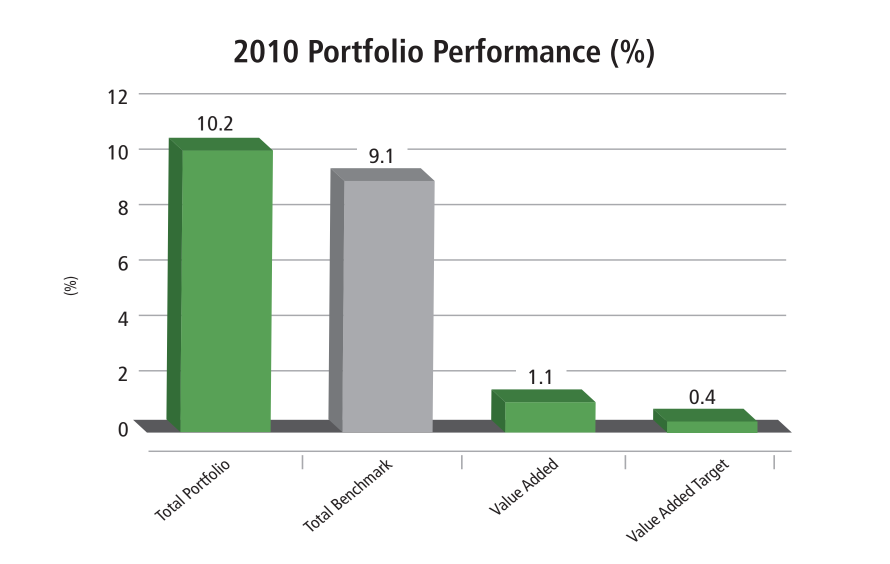
Yields on government bonds declined through the year as central banks kept short-term rates low, while long-term bond rates were held down by quantitative easing and low inflation. Going into 2011, the current low level of bond yields are expected to translate into very modest returns from the bond market in the coming years.

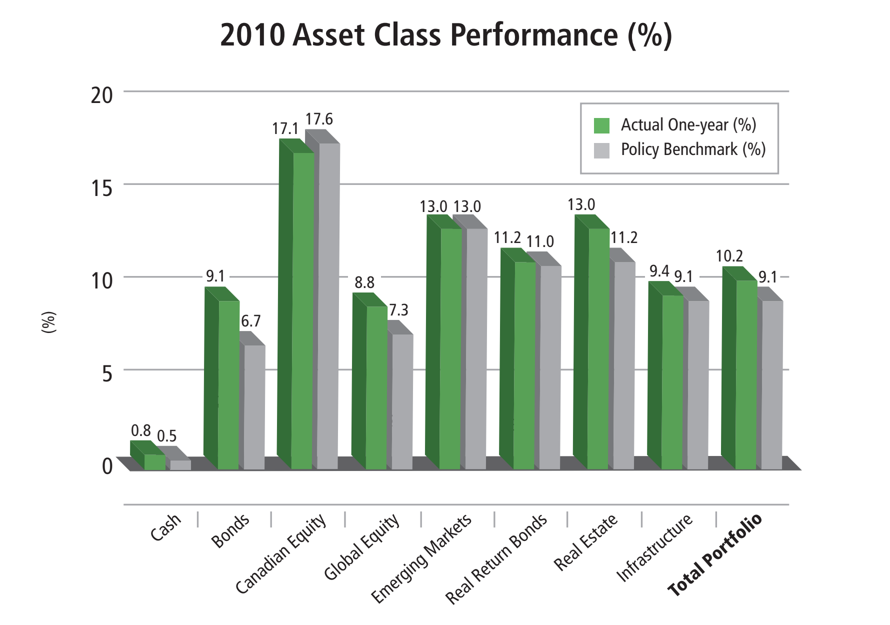


Performance Results

2010 portfolio rates of return

WCB-Alberta's annual return of 10.2% in 2010 follows a return of 13.8% in 2009. The portfolio contains an allocation to equities of approximately 40% of total assets. The equities in the portfolio are the main drivers of risk and return volatility. For the year, Canadian equities were up 17.1% and global equities were up 8.8%. Relative to the policy benchmarks, the portfolio outperformed by 1.1%. Performance relative to the benchmark was positively impacted by the active management of bonds, equities and real estate.





Performance benchmarks

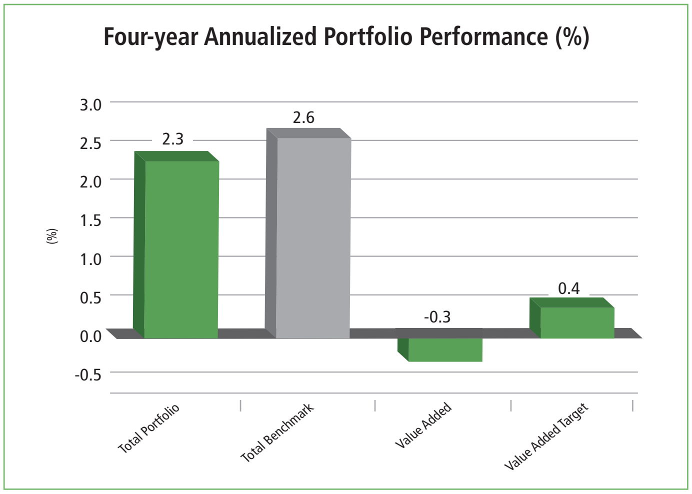
Benchmarks are used to assess portfolio performance relative to underlying market performance. The selection of appropriate benchmarks is carried out at the asset class level. The total portfolio benchmark is comprised of the asset class benchmarks weighted by the investment policy asset mix targets.

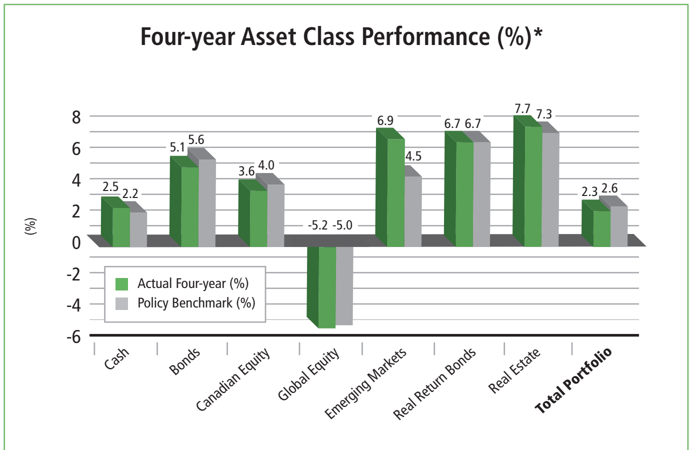
Asset Class	Benchmark
Cash	Dex 91 Day Treasury Bill Index
Bonds	Dex Bond Universe Index
Real Return Bonds	Dex Government of Canada Real Return Bond Index
Canadian Equity	S&P/TSX Composite Index
Global Equity	MSCI World Ex-Canada (50% Hedged)
Emerging Markets	MSCI Emerging Market Index
Real Estate	IPD Large Institutional Property Index
Infrastructure	50% Dex Government of Canada Real Return Bond Index and 50% MSCI All Country World Index (100% Hedged)

Performance Results continued

Four-year portfolio rates of return

Over the four years ending on Dec. 31, 2010, the portfolio has earned an annualized positive rate of 2.3% versus the policy benchmark return of 2.6%. The four-year rates of return are the primary performance metrics specified in the Investment Policy. Focusing on four-year performance takes the focus away from the more volatile nature of short-term investment returns.





*Infrastructure is not included as it has not been held in the portfolio for four years.

Portfolio real returns – Inflation adjusted performance

WCB rate-setting and actuarial valuation processes incorporate a long-term investment return assumption. This is currently set at 3.0% plus inflation in order to pay all outstanding claim benefits. With a 2010 rate of return of 10.2% and Alberta's inflation at 1.0%, the real rate of return was 9.2%—a large margin above the actuarial required real rate of return of 3.0%.

A return above the actuarial required rate may result in an increase to WCB's funded position; this does not, however, directly impact premium rates. Rates are set based on the required long-term rate of return and the expected cost of claims. Should the funded position descend below the levels established in WCB's Funding Policy, a replenishment levy may be required. If the funded position rises above, a special employer dividend may be paid. A levy was not included in 2010 or 2011 premium rates.

Portfolio Real Return versus Actuarial Required Return (%)

– Period ending Dec. 31, 2010

	1 year	2 year	3 year	4 year	10 year
Total Portfolio Return	10.2	12.0	2.1	2.3	5.4
Alberta Inflation	1.0	0.4	1.3	2.2	2.6
Portfolio Real Return	9.2	11.6	0.8	0.1	2.8
Actuarial Discount Rate	3.0	3.0	3.0	3.0	3.0
Above (Below) Actuarial Required Rate	6.2	8.6	-2.2	-2.9	-0.2

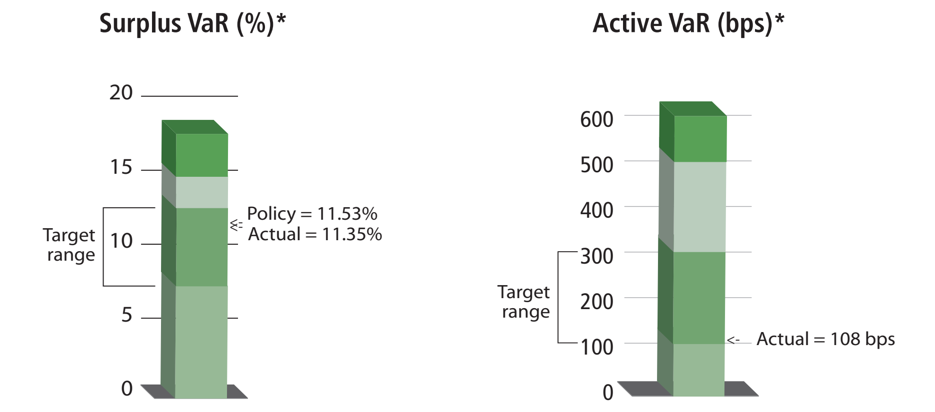
* Source: Stats Canada, Alberta CPI, All-Items, Monthly Average

Portfolio risk measurement

The measurement of risk is critical for investment decision-making and portfolio monitoring.

WCB measures risk in two ways: forward-looking risk based on current conditions and actual holdings, and by the volatility of returns. The first can be thought of as a measure of what might happen, while the second a measure of what actually did happen.

Forward-looking risk measurement is calculated by our investment risk measurement system. The most important metrics to WCB are the surplus risk and the active risk. Surplus risk, or funded position risk, is a measure of how much surplus could be lost in a tough market. Active risk is a measure of how much WCB's portfolio could underperform the policy benchmark in a period where active management doesn't fare well. The following graphic shows the surplus risk and active risk for WCB's portfolio at Dec. 31, 2010. The colour thermometers show a reasonable level of risk with both types of risk within the normal zone.



* VaR is calculated with 90% confidence and a 1 year time horizon

Performance Results continued

Portfolio return volatility

Portfolio return volatility is another measure of risk for an investment portfolio. The main determinants of return volatility are the asset mix of the portfolio and the overall level of volatility in capital markets.

WCB-Alberta has a policy target for portfolio volatility that is lower than benchmark volatility. In 2010, the volatility of WCB's portfolio was 5.2% versus 4.9% for the benchmark. Volatility in capital markets has declined dramatically since the high volatility experienced in 2008 and early 2009. Thus, overall, WCB's portfolio generated more return with only slightly higher volatility than the passive policy benchmark. Over the four years ending Dec. 31, 2011, the volatility of WCB's portfolio was lower than the benchmark (7.6% versus 7.8%).

Total Portfolio Volatility versus Benchmark (%)
– Period ending Dec. 31, 2010

	1 year	2 year	3 year	4 year
Total Portfolio Volatility	5.2	6.4	8.7	7.6
Benchmark Volatility	4.9	6.8	9.0	7.8
Above (Below)	0.3	-0.4	-0.3	-0.2

Total Portfolio Volatility versus Benchmark (%)
– Annual

	2010	2009	2008	2007
Total Portfolio Volatility	5.2	7.6	10.7	2.4
Benchmark Volatility	4.9	8.5	10.8	2.1
Above (Below)	0.3	-0.9	-0.1	0.3

Total Portfolio Volatility versus Long-term Expectation (%)
– Period ending Dec. 31, 2010

	1 year	2 year	3 year	4 year
Total Fund Volatility	5.2	6.4	8.7	7.6
Expected Volatility	7.9	7.9	7.9	7.9
Above (Below)	-2.7	-1.5	0.8	-0.3

Portfolio Management

Asset mix

Managing the asset mix is an ongoing activity with the frequency of transactions dependant on market volatility, relative performance between asset classes and the strategic positioning of the portfolio.

To allow the asset mix to be rebalanced, futures contracts are used by WCB's asset mix manager. By using futures contracts, the asset mix can be easily adjusted without disrupting the portfolio managers who oversee the cash market investments.

During 2010, equities were sold several times as strong returns from equities increased the percentage allocation in the portfolio. Proceeds were used to fund new allocations to real estate and infrastructure.

Asset mix – background

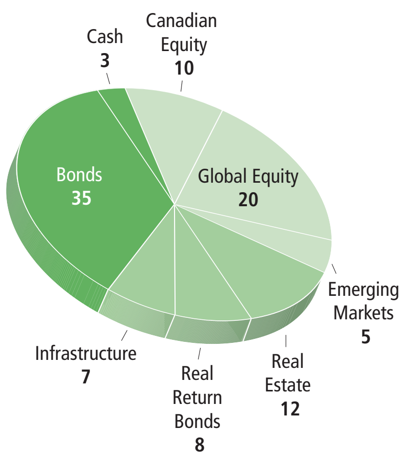
The asset mix of a portfolio represents the allocation to the different asset classes held in the portfolio.

The optimal asset mix for a portfolio is typically selected through an asset liability modelling process. This process takes into account the organization's financial assets and liabilities, risk tolerance and investment objectives.

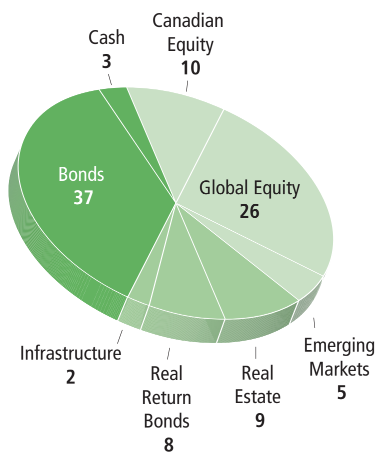
Upper and lower bands are placed around the policy asset mix target to allow for temporary fluctuations in the values of the various asset classes.

Empirical evidence suggests that upwards of 80% to 90% of portfolio risk and returns are derived from the asset mix.

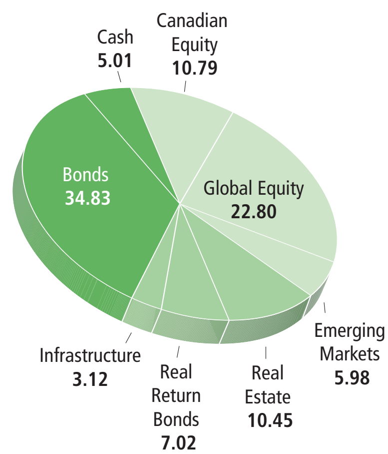
Long-term Policy Targets (%)



Current Policy Targets (%)



Actual Asset Mix (%)



Portfolio Management continued

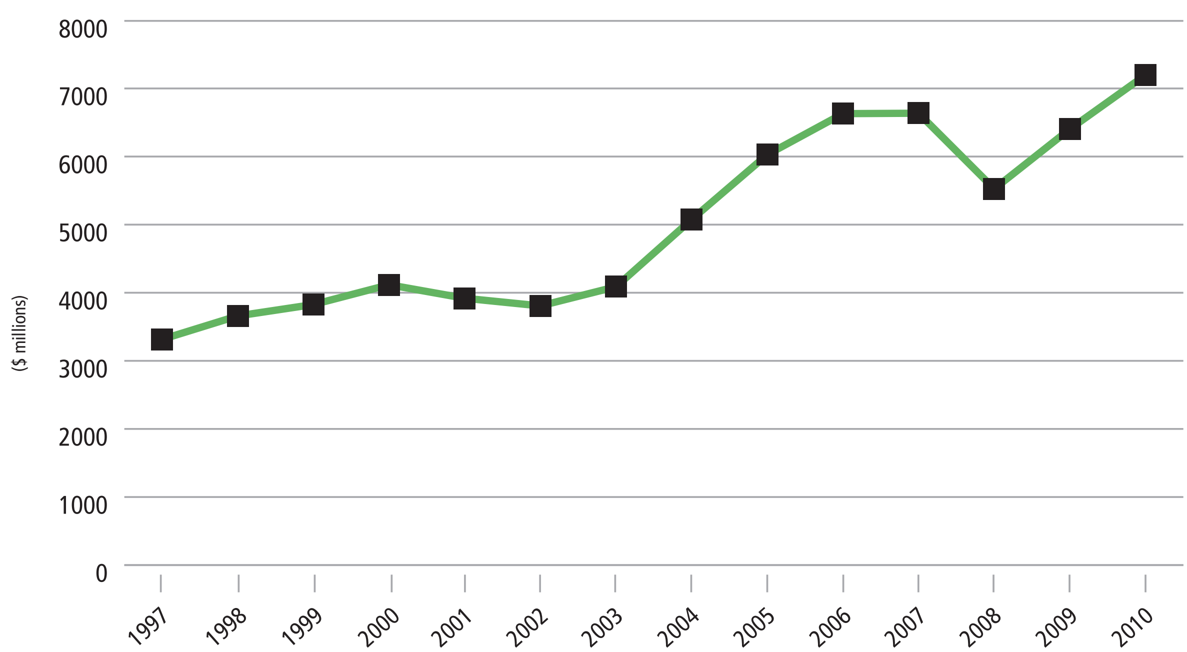
Policy compliance

On Dec. 31, 2010 the investment portfolio was in compliance with WCB-Alberta's Investment Policy in all areas.

Portfolio market value

The market value of the investment portfolio was $7.2 billion on Dec. 31, 2010. The increase in market value during 2010 is a result of the higher than expected rate of return for the year.

Portfolio Market Value – Summary of the growth of WCB-Alberta's Investment Assets



Internal investment management

Two fixed income portfolios are managed internally by WCB's investment management department. The two portfolios represent approximately 22% of the total portfolio assets. On Dec. 31, 2010, the Canadian universe bond portfolio had a market value of $1,062 million and the real return bond portfolio had a market value of $503 million. The internal bond portfolios performed well with returns exceeding the benchmarks for both portfolios. The universe bond portfolio returned 7.1% versus the benchmark return of 6.7% and the real return bond portfolio returned 11.2% versus the benchmark return of 11.0%.

External investment managers

All of the equities, real estate and a portion of the bond portfolios are contracted to external investment management companies. The selection of external managers and the constant management of the combinations and allocations is a key function of WCB's investment management department.

In total, WCB contracts 16 external investment managers who collectively manage 25 separate mandates. In 2010, three new managers were hired for real estate and infrastructure, and one global equity manager was terminated. The external managers as of Dec. 31, 2010, their head office locations and mandates are shown in the accompanying table.

Manager	Location	Mandate
Alberta Investment Management Corporation	Edmonton, Canada	• Cash Equivalents • Canadian Bonds • Real Estate • Infrastructure
Altrinsic Global Advisors	Stamford, USA	• Global Equity
Analytic Investors	Los Angeles, USA	• U.S. Equity
Baillie Gifford Overseas	Edinburgh, Scotland	• International Equity • Emerging Markets
Blackrock Asset Management	Toronto, Canada	• Canadian Equity • U.S. Equity • U.S. 130/30 Equity • International Equity
Bentall Kennedy	Vancouver, Canada	• Real Estate
Brookfield Asset Management	Toronto, Canada	• Infrastructure
Canso Investment Counsel	Richmond Hill, Canada	• High Yield Bonds
Greystone Managed Investments	Regina, Canada	• Mortgages • Real Estate
Guardian Capital	Toronto, Canada	• Canadian Equity • Canadian REIT
Lazard Asset Management	New York, USA	• Global Infrastructure
Marathon Asset Management	London, United Kingdom	• International Equity
Montez Corporation	Toronto, Canada	• Real Estate
Rogge Global Partners	London, United Kingdom	• Global Bonds
Sionna Investment Managers	Toronto, Canada	• Canadian Equity
State Street Global Markets	Boston, USA	• Currency and Asset Mix Overlay

2010 Initiatives

Each year, an Investment Management Strategic Plan is approved by WCB's Board of Directors. The plan has a three-year time frame. It provides the Board of Directors with a long-term perspective on the portfolio management strategy and forthcoming portfolio changes. The initiatives completed in 2010 followed that plan and included some activities necessitated by rapidly changing capital markets.

Asset liability management

The most important aspect of asset liability management for WCB-Alberta is to determine and implement an asset mix that better matches our liability and aligns with the risk tolerance of the organization. In this regard, amendments to the Investment Policy were approved by the Board of Directors in 2009 and changes to the asset mix began in 2010. The long-term target for equities was reduced from 44% to 35% and the target for inflation-sensitive investments (real estate, infrastructure and real return bonds) was increased from 18% to 27%. Overall, this change should provide a portfolio with a more stable return stream and a better match to the inflation-sensitive WCB liabilities.

New managers and mandates

New mandates were added for direct real estate, real estate investment trusts, direct infrastructure and publicly listed infrastructure. These mandates were added to increase allocations to these asset classes and they will be funded over the next few years in accordance with the Investment Strategic Plan. The combination of publicly traded and private assets allows for a broad exposure and some management flexibility.

A portion of U.S. equities were transitioned from a long only approach to one that also allows the manager to take short positions in securities in which the manager has a poor performance outlook. Additionally, one global equity manager was replaced during the year. The assets from this mandate were allocated to other existing managers.

Risk measurement system

The implementation and integration of a quantitative investment risk measurement system continued in 2010. The system loads market value and specific characteristics on every security owned within the portfolio, and analyzes risks based on the actual holdings at a point in time and across the entire portfolio. Liabilities are also modelled by the system for a better understanding of risk relative to liabilities. The system is now being used to measure and report surplus risk and active management risk. A process for active risk budgeting was established that should help improve the consistency of active management. Risk management is important and multi-faceted; the risk system helps measure risk, but is only one aspect of the risk management process.

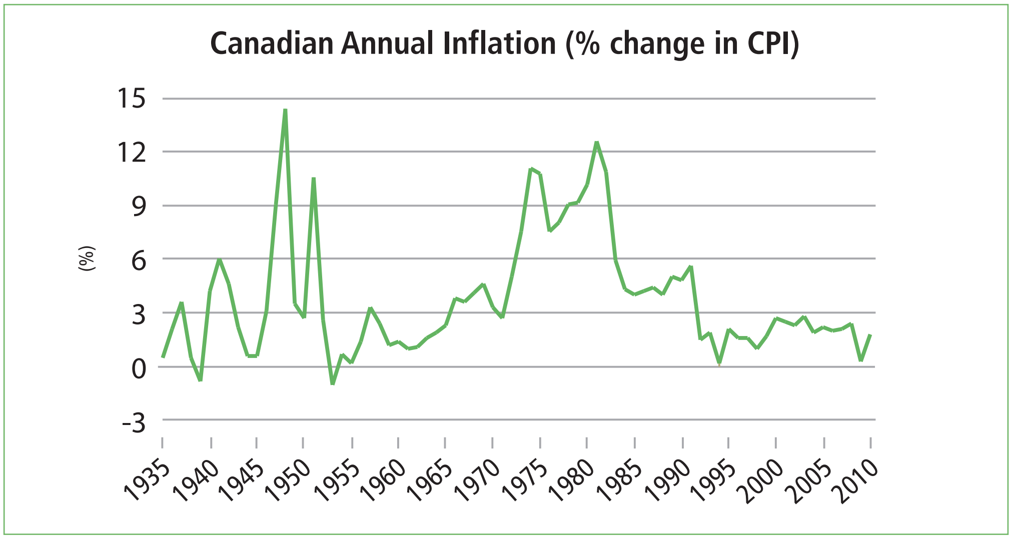
Looking Forward: 2011 and Beyond

Capital market outlook

The capital market outlook continues to be very uncertain heading into 2011. A global economic recovery appears to be unfolding, however there are many questions about the sustainability of the recovery and the unintended consequences of monetary policy and high government debt levels.

Equity markets were strong in 2010 for a second year in a row. The equity market is now fully anticipating a sustainable global economic recovery and the continued growth in corporate earnings. This suggests that returns will be more modest in 2011 and 2012. Emerging markets are expected to drive global growth as their fiscal strength and younger demographics are much more positive than in developed economies. Strong growth in emerging market economies will be positive for emerging markets equities, global multinationals with exposure to these markets, and commodity prices.

In the longer term, the key issue for markets and investors like WCB, which have inflation-sensitive liabilities to pay, is the risk of a period of high inflation. The monetary and fiscal stimulus being injected into the global financial system may contribute to higher inflation over the medium term. This issue is still a few years away as there is currently too much slack in labour markets (high unemployment and underemployment) and excess manufacturing capacity for inflation to be a short-term concern. As illustrated in the following chart, developed economies have not seen an environment of high inflation since the 1970s. Strong economic growth, in the emerging markets is creating demand for raw materials and an expanding middle class is increasing demand for finished goods and services. The growth in the global middle class is beginning to have inflationary implications that need to be carefully monitored.



Source: Statistics Canada

Looking Forward: 2011 and Beyond continued

Interest rates on government bonds have been driven so low that future returns are likely to be very disappointing and could be sharply negative if the risk of higher inflation or rising real yields comes to pass. The yields to maturity on 10-year and 30-year Government of Canada bonds were 3.1% and 3.5% respectively on Dec. 31, 2010.

Forecasting short-term market performance is difficult at best. Studies show that investors typically cause themselves more harm than good by trying to time short-term capital market movements. WCB is a long-term investor with a strong financial position. This allows for patience and the ability to stay committed to proven investment principles and beliefs.

Implementing the Strategic Plan

The Investment Management Strategic Plan guides the management of the investment portfolio.

The updated plan (approved by the Board of Directors in October 2010) contains three strategic themes:

- Focus on risk management
- Decrease market risk (relative to liabilities)
- Enhance active management

These themes help guide investment strategy and portfolio management, enabling an investment management solution to be tailored to the specific needs of WCB. These needs incorporate the overall corporate strategy, unique liabilities and a strong financial position.

In alignment with the three themes, there are several portfolio changes planned for 2011. Amendments to the Investment Policy in 2009 included an increased target allocation to real estate and infrastructure. Implementation of the increases started in 2010 and will continue in 2011 with managers and mandates now in place for these asset classes.

Other specific portfolio changes include continuing to increase the allocation to internal fixed income, mortgages and global bonds. Internal management of short-term cash investments is also planned for 2011. With a decreased allocation to global equities, some consolidation of managers and mandates may be required to prevent mandates that are too small to influence total fund risk and returns.

Focusing on the three themes outlined in the strategic plan will help with the continued maintenance of a fully-funded position and further reduce the risk of premium rate volatility.

WCB-Alberta Investment Beliefs

1. The long-term asset mix is the main determinant of a portfolio's risk and return.
2. Diversification of asset classes, implementation strategies and securities can improve the risk and return characteristics of the portfolio.
3. There is a relationship between risk and return – in the absence of skill, higher returns require taking higher risk.
4. Over longer time periods, equities will outperform bonds to compensate investors for assuming higher risk.
5. Asset mix can positively impact the relationship between assets and liabilities and reduce funded position volatility.
6. Over longer time periods, currency exposure should not add or detract value. Over shorter time periods some currency exposure can act as a diversifier but large exposures can increase portfolio volatility.
7. Short-term market timing is an inefficient strategy for consistently increasing portfolio returns.
8. Market inefficiencies create opportunities to enhance returns and reduce risk, however the level of inefficiency can vary by asset class, region, market and time period.
9. Effective implementation strategies can improve the net returns and/or lower the risk of the portfolio.

Workers' Compensation Board

Alberta

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