



Diane Roy
Director, Regulatory Services

Gas Regulatory Affairs Correspondence
Email: gas.regulatory.affairs@fortisbc.com

Electric Regulatory Affairs Correspondence
Email: electricity.regulatory.affairs@fortisbc.com

FortisBC
16705 Fraser Highway
Surrey, B.C. V4N 0E8
Tel: (604) 576-7349
Cell: (604) 908-2790
Fax: (604) 576-7074
Email: diane.roy@fortisbc.com
www.fortisbc.com

December 18, 2015

Via Email
Original via Mail

Association of Major Power Customers of BC
c/o Bull, Housser & Tupper LLP
1800 – 510 West Georgia Street
Vancouver, BC V6B 0M3

Attention: Mr. Matthew Keen

Dear Mr. Keen:

Re: FortisBC Energy Inc. (FEI)
Application for its Common Equity Component and Return on Equity (ROE) for 2016 (the Application)
Response to the Association of Major Power Customers of BC (AMPC) Information Request (IR) No. 1 to FEI

On October 2, 2015, FEI filed the Application referenced above. In accordance with Commission Order G-177-15 setting out the Regulatory Timetable for the review of the Application, FEI respectfully submits the attached response to AMPC-FEI IR No. 1.

If further information is required, please contact the undersigned.

Sincerely,

FORTISBC ENERGY INC.

Original signed:

Diane Roy

Attachments

cc: Commission Secretary
Registered Parties (e-mail only)

FortisBC Energy Inc. (FEI or the Company) Application for Common Equity Component and Return on Equity for 2016 (the Application)	Submission Date: December 18, 2015
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1 **First Topic: FEI Introduction**

2 **Reference: Exhibit B-1, FEI Application, pages 1 - 6**

3 **Preamble:**

4 Business risk of FEI Overview

5 1.1 FEI mentions the amalgamation of its Whistler and Vancouver Island subsidiaries.
6 Please provide the total net income for each of FEI and its two subsidiaries in 2013 and
7 indicate the income loss if all three had received FEI's current allowed ROE and
8 common equity parameters and the income gained if all three had been allowed 9.5%
9 ROE on 40% common equity for 2013.

10

11 **Response:**

12 FEVI and FEW were sister companies of FEI, not subsidiaries.

13 The total actual 2013 regulated net income for FEI, FEVI and FEW is provided in the first table
14 below. The FEVI and FEW income in 2013 shown in the first table does not reflect the equity
15 thickness and ROE that were ultimately approved, as the Stage 2 Decision was not received
16 until 2014. For this reason, FEI has not used the actual 2013 income as the basis of
17 comparison for this response. Instead, in the second table below, FEI uses the approved
18 income for each of the utilities, after adjusting for the final approved equity thickness and ROE,
19 as the basis of comparison.



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((\$000s))	FEI 2013 Actual	FEVI 2013 Actual ²	FEW 2013 Actual ²	Total 2013 Actual
Income Statement				
Revenue ¹	1,129,596	192,783	11,358	1,333,737
Other Operating Revenue	23,868	18,673	28	42,569
Cost of Gas	530,112	68,030	2,900	601,042
O&M	196,174	31,118	551	227,843
Depreciation and Amortization	142,912	37,938	1,502	182,352
Rate Stabilization Deferral Account	-	(4,780)	-	(4,780)
Other (Incl. Property and Sundry Taxes and Transportation Costs)	51,239	15,014	2,797	69,050
Earnings before Interest and Taxes	233,027	64,136	3,636	300,799
Interest	111,874	23,904	1,194	136,972
Income Tax	25,239	8,111	555	33,905
Net Income	95,914	32,121	1,887	129,922

Notes:

¹ Non-normalized and includes RSAM revenue. Miscellaneous revenue is included in "Other Operating Revenue" line

² Due to the timing of the 2013 Cost of Capital Decision actually received in 2014, 2013 actual results were calculated using the prior approved equity structures and trued-up in 2014

	Approved Equity Return ¹	38.5% Equity, 8.75% ROE Scenario	40.0% Equity, 9.50% ROE Scenario
Equity Return (\$000s)			
FEI	\$ 93,235	\$ 93,235	\$ 105,171
FEVI	31,021	27,223	30,708
FEW	1,580	1,350	1,523
Total Equity Return	\$ 125,836	\$ 121,808	\$ 137,402

Notes:

¹ FEI Approved Equity Structure was 38.5% Equity, 8.75% ROE.

FEVI Approved Equity Structure was 41.5% Equity, 9.25% ROE.

FEW Approved Equity Structure was 41.5% Equity, 9.50% ROE.

1.2 FEI indicates there has been a slight increase in its business risk since the last GRA filing in 2012.

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- 1 a) Please indicate in which filings since 1994 has FEI or its predecessor companies
2 indicated to the BCUC that its business risk had decreased (provide the extracts
3 from the evidence).

4
5 **Response:**

6 Since the early 2000s, FEI's business risk has been increasing and its risk assessments have
7 reflected that fact. FEI's historical residential use per customer has declined. There is a
8 declining trend of natural gas use in space-heating and water heating applications. Political risk
9 is significantly higher than 10 years ago and continues with its upward trend.

10 Although the overall business risk since the early 2000s has been increasing, FEI's individual
11 risk factors have been assessed as lower or higher depending on the circumstances at the time
12 of the assessment. For instance, in the GCOC Stage 1 proceeding, FEI assessed its
13 Commodity Price risk factor and Energy Price risk category as lower than 2009 levels. The
14 same was true for availability of supply risk which was assessed to be lower than 2009 levels. In
15 this Application FEI has assessed its individual risk related to Commodity Price risk factor to be
16 lower than in 2012, although the decrease is more than offset by the increase in other factors,
17 particularly the increase in political risk.

18 FEI has not addressed BC Gas' 1994 and 1999 business risk analysis in this response as the
19 format and context of those studies are not similar to FEI's current business risk format.

- 20
21
22
23 b) Please indicate the hearing when FEI's common equity ratio was reduced to 33%
24 and the DBRS bond rating prior to that hearing and after that hearing, that is the
25 rating agencies reaction to that decision. Please provide a copy of the DBRS rating
26 report subsequent to the decision.

27
28 **Response:**

29 This response addresses AMPC IR 1.2.b through AMPC IR 1.2.e.

30 FEI's (then BC Gas Utility Ltd.) common equity ratio was established at 33% in the 1994 cost of
31 capital proceeding, increased to 35% and 40% in March 2006 and December 2009 respectively,
32 and decreased to the current 38.5% in May 2013. DBRS rated the Company "A" over this
33 period.

34 FEI's common equity is not the only factor that is considered by rating agencies. FEI's average
35 allowed ROE between 1994 and 2005 (the period in which the common equity ratio was set at

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33%) was at 9.89%, with the maximum allowed ROE of 12% in 1995 and minimum allowed ROE of 9.03% in 2005. Further, as discussed on page 26 of the Commission's 2006 Decision (Order G-14-06), although the Commission panel was not able to quantify the amount of risk increase, it determined that FEI's long-term risk (the probability of FEI not earning a return of its capital) was higher than 1994 levels:

"The Commission Panel can say with certainty that TGI's business risk has not declined in the period 1994-2005. It cannot say by how much its business risk increased, but it can say that although the probability of TGI not earning a return of its capital has increased, it continues to be very low."

FEI's capital structure between 1994 and 1999 included a percentage of preferred shares. However, the preferred shares that accounted for ~9.4% of the capital structure were subsequently redeemed and replaced with debt.

Moody's did downgrade FEI prior to the March 2006 Decision (Moody's downgraded FEI from A2 to A3 in December 2005) and has not upgraded FEI's rating back to A2 since then. FEI's proposed increase in the equity component of its capital structure will help to protect its current "A" category ratings, which is important considering the difficulty in moving credit ratings back up after a downgrade, even if increases in the common equity portion of the capital structure or ROE are subsequently made.

The increase in FEI's common equity ratio from 33% to 35% in the 2006 Decision was partly offset by further decreases in FEI's allowed ROE during the 2006-2008 periods.

In December 2009 FEI's equity thickness and allowed ROE were increased to 40% and 9.5% respectively. This increase was a response to the significant increase in FEI's business risk as well as the capital market disruptions.

Finally, as explained on page 24 of FEI's Application, when FEI's common equity ratio and allowed ROE were decreased to the current levels in 2013, FEI was initially placed on negative watch by Moody's due to expected deterioration of credit metrics. The subsequent removal of the negative watch appears to be based on Moody's expectation of a stable regulatory environment and stable, albeit weak, financial metrics.

DBRS rating reports for 1994, 1995, 2005, 2007, 2009, and 2010 are provided in Attachment 1.2b. All such reports incorporate DBRS' reaction to the various cost of capital decisions. Note that DBRS did not issue a credit opinion in 2006 and as such, the 2007 credit opinion report would be considered the report subsequent to the 2006 ROE Decision. A 2006 DBRS press release confirming the ratings has also been included in Attachment 1.2b for reference purposes. The rating reports for 2011-2015 periods are provided in FEI's Appendix A-2, Supporting Documents.

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c) Please indicate the hearing when FEI’s common equity ratio was increased to 35% and the DBRS bond rating prior to that hearing and after that hearing, that is the rating agencies reaction to that decision. Please provide a copy of the DBRS rating report subsequent to the decision.

Response:

Please refer the response to AMPC IR 1.1.2.b.

d) Please indicate the hearing when FEI’s common equity ratio was increased to 40% and the DBRS bond rating prior to that hearing and after that hearing, that is the rating agencies reaction to that decision. Please provide a copy of the DBRS rating report subsequent to the decision.

Response:

Please refer the response to AMPC IR 1.1.2.b.

e) Please indicate the hearing when FEI’s common equity ratio was decreased to 38.5% and the DBRS bond rating prior to that hearing and after that hearing, that is the rating agencies reaction to that decision. Please provide a copy of the DBRS rating report subsequent to the decision.

Response:

Please refer the response to AMPC IR 1.1.2.b.

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1.3 FEI indicates (page 4) it views the two major changes to its risk as political risk and performance based regulation (PBR).

1.3.1 In previous testimony before the BCUC on behalf of FEI, Ms. McShane made the following statements which were put to her in the BCUC GCOC 2012 hearing:

- a) "Most of the key elements of political risk to which FEI is exposed have been outlined above in the context of market/demand and competitive risk" Does FEI agree that political risk is how it manifests itself in terms of FEI's ability to compete with alternative fuels? If not, please fully explain why not?

Response:

As explained on page 4 of FEI's Application, key indicators such as throughput, use per customer, captures rates or market shares in various sectors may be used, in conjunction with other considerations, to assess the change in a utility's risk status. Therefore FEI agrees that some aspects of the political risk category such as mandatory connection policies promoted by certain municipalities will eventually manifest themselves in terms of FEI's ability to compete with other fuel options. The manifestation of political risks is not always instantaneous. The policy lag, that is the time until the full impact of a certain policy manifests itself in terms of market shift risk factors, can vary depending on the specific market indicator and the policy in question. For instance, the real impact of changes in building codes may not be evident until the consumers start to live in the newly built code compliant dwellings.

Other aspects of political risk, such as risks related to Aboriginal rights and title issues, may manifest themselves in other ways such as project delays and cost over-runs or risks relating to the recovery of capital invested in assets on land that is subject to title claims.

- b) "The obligation to consult with, and if necessary, accommodate First Nation's interests ultimately lies with the Crown, not the utility. The issue related to First Nation's rights and claims expose FEI to operational and regulatory uncertainty and as well as the risk of litigation." Does FEI agree with this statement? If not, please fully explain why not?

Response:

FEI is not able to confirm the source of the statement, but agrees with what is stated.

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The requirement to consult and, if necessary, accommodate First Nations in the context of unproven rights and title predates 2012. The significant development since 2012 is the *Tsilhqot'in* decision, which addressed the test for proving aboriginal title and presented the first example of how that test would be applied. Although the Court limits the requirement for consent to after Aboriginal title has been proven, there is a passage in the decision that has been interpreted by First Nations as requiring something more than consultation prior to proof of title, under certain circumstances. The Court held (at para. 91): “Where a claim is particularly strong — for example, shortly before a court declaration of title — appropriate care must be taken to preserve the Aboriginal interest pending final resolution of the claim.” Although this was put forward as an exception to a general rule, many First Nations perceive their claims for Aboriginal title to be “particularly strong”. Please refer to the response to BCUC IR 1.18.2 for further discussion.

1.3.2 Please indicate which Canadian utilities have been placed on performance based regulation and as a result failed to earn their allowed ROE. For any such Canadian utility please provide its allowed ROE and actual ROE during the period when it was under PBR and describe the incentive regulation regime compared to that for FEI.

Response:

Out of the four natural gas utilities studied in FEI’s PBR Application jurisdictional comparison section, ATCO Gas, Union Gas and Enbridge Gas Distribution are currently under PBR. FEI’s understanding is that these three utilities have been able to meet or exceed their allowed ROE in their latest financial year. FEI does not have access to the actual earned ROE for all Canadian utilities that are under PBR. Furthermore, FEI could not state that any potential failure to meet allowed ROE in other utilities with PBR plans is only due to the reasons specific to their PBR plan.

1.4 FEI references Mr. Coyne’s ROE testimony that capital market conditions in the US and Canada are highly integrated.

a) Please define what FEI judges to be highly integrated.

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1 **Response:**

2 FEI's Application concludes that Canadian and US capital markets are highly integrated as
3 derived from Mr. Coyne's evidence regarding the interdependency of economic and capital
4 market conditions in Canada and U.S.

5 For instance, Mr. Coyne's evidence demonstrates that the correlation between average yields
6 on 10 year government bonds in Canada and the U.S. since 1990 has been very strong at 0.97
7 and concludes on page 27 of his evidence that the "correlations of this degree are reflective of
8 closely integrated financial markets".

9 Mr. Coyne's evidence also provides reference to research done by other notable institutions that
10 support his position. For instance, a Discussion Paper presented by the Bank of Canada and
11 referenced on page 25 of Mr. Coyne's evidence provides the following analysis on the
12 integration of Canadian and U.S. financial markets:

13 *"For Canada in particular, developments in U.S. economic activity and financial*
14 *conditions are likely to exert a significant effect on the Canadian business cycle.*
15 *Historically, the effect of the U.S. business cycle on the Canadian business cycle has*
16 *generally been studied through trade linkages, since the United States represents about*
17 *three quarters of Canadian trade. However, there are also strong financial linkages*
18 *between Canada and the United States. For example, Canadian non-financial*
19 *corporations rely on U.S. financing, since about 20 per cent of shares of Canadian firms*
20 *are held by U.S. residents. Moreover, foreign loans typically account for about 40 per*
21 *cent of total bank loans to the Canadian non-bank sector, highlighting the importance of*
22 *foreign credit for Canada [excluding mortgages]. Therefore, developments in U.S.*
23 *financial conditions may exert a significant effect on the Canadian business cycle".*

24 For more information on the issue of the integration between Canadian and U.S. capital
25 markets, please refer to pages 24 to 28 of Appendix B.

26
27

28
29 b) Does FEI mean perfectly integrated?
30

31 **Response:**

32 No. Please refer to the response to APMC IR 1.1.4a.

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- 1
2 c) Would FEI accept the standard finance notion that “perfectly integrated” means the
3 “Law of One Price” applies such that identical assets sell for identical prices?
4

5 **Response:**

6 Please refer to Mr. Coyne’s response to APMC IR 1.3.8.
7
8

9
10 1.5 FEI indicates it is now part of Fortis.
11

- 12 a) Please indicate whether Fortis is listed on any foreign stock exchange.
13

14 **Response:**

15 Fortis Inc. is only listed on the Toronto Stock Exchange.
16
17

- 18
19 b) Please list the percentage of Fortis non-Canadian shareholders for each year since
20 2000.
21

22 **Response:**

23 FEI does not have the ability to access the requested information back to the year 2000. The
24 chart below shows the percentage of Canadian versus non-Canadian shareholders, including
25 institutional ownership, from 2010 to the most recent available date. This data was obtained
26 through Bloomberg and is based on publicly reportable holdings. Bloomberg only has this data
27 available from 2010 onwards.

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	Canadian Shareholders	Non-Canadian Shareholders
12/11/2015	80.07%	19.93%
12/28/2014	74.88%	25.12%
12/29/2013	74.55%	25.45%
12/30/2012	80.26%	19.74%
12/25/2011	77.82%	22.18%
12/26/2010	81.17%	18.83%

Source: Bloomberg

- c) Please indicate whether a US pension or mutual fund receives a dividend from Fortis without paying any with-holding tax.

Response:

Non-resident tax applies to all shareholders in absence of an exception certificate issued by the CRA specific to the shareholder. Please note that Depository Trust & Clearing Corporation (DTCC) is exempt from withholding by transfer agents and the responsibility for withholding is delegated to their participants that have access to the beneficial holder's records and tax status. FEI does not have access or means of knowing if DTCC Participants are following the same practice as transfer agents.

- d) Please indicate whether the tax treatment for a non-Canadian shareholder would be identical to that for a Canadian shareholder in the event of a) a rights issue or b) a spin-off of assets.

Response:

Typically a rights issue and spin off of assets are complex in nature, and therefore it is more likely that the tax treatments would not be identical. The tax treatment of such transactions is dependent upon the series of transactions to accomplish the rights issue or spin-off of assets, the country of residence of the non-Canadian shareholder and the existence of a tax treaty between Canada and the country in which the non-Canadian shareholder is a resident.

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e) Please confirm that in its September 11, 2014 short form prospectus Fortis states “the securities being offered under this short form prospectus have not been and will not be registered under the US Securities Act of 1933, as amended, or any state securities laws, and may not be offered or sold within the United States...”.

Response:

The full statement per the September 11, 2014 short term prospectus is as follows:

“The securities being offered under this short form prospectus have not been and will not be registered under the United States Securities Act of 1933, as amended (the “1933 Act”), or any state securities laws, and may not be offered or sold within the United States unless the securities are registered under the 1933 Act or an exemption from the registration requirements of the 1933 Act is available.”

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1 **First Topic: FEI Business Risk**

2 **Reference: Exhibit B-1 FEI Application pages 11 & 2**

3 **Preamble:**

4 Business risk of FEI

5 2.1 Consistent with the BCUC statement on page 11 would FEI accept that in the context of
6 a regulated utility allowed a fair ROE, risk is the failure of the utility to earn its allowed
7 ROE? If not confirmed, please fully explain your response.

8
9 **Response:**

10 Not confirmed. As explained on pages 1 and 2 of FEI's Application, the application of the Fair
11 Return Standard must reflect, among other things, the business risk that FEI faces in achieving
12 a fair return on and of invested capital in both the long-term and short-term. The failure of a
13 utility to earn its current allowed ROE can only provide insight to a utility's short-term risk. For
14 more information on the subject of long-term versus short-term risks please refer to the
15 response to BCUC IR 1.4.1.

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18
19 2.2 Please provide a table – for FEI and its predecessor company - that lists their base
20 allowed ROE, incentive ROE, and earned or actual ROE for each year since 1990.
21 Please fully explain the reasons for any deviations of allowed from the actual base ROE.

22
23 **Response:**

24 FEI has provided the requested table where data was available. Any variances between allowed
25 and actual ROE (after-sharing ROE in years where applicable) greater than 50 basis points are
26 explained below the table. The 1992 variance is not explained below because only the ROEs
27 were available and not the underlying data.

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ROE

	<u>Allowed</u> <u>(a)</u>	<u>Actual Pre-ESM</u> <u>(b)</u>	<u>Actual Post-ESM²</u> <u>(c)</u>	<u>Variance³</u> <u>(d)</u>
1990	N/A	N/A	N/A	N/A
1991	N/A	N/A	N/A	N/A
1992	12.25%	9.06%	N/A	-3.19%
1993	N/A	11.91%	N/A	N/A
1994	10.65%	9.73%	N/A	-0.92%
1995	12.00%	12.03%	N/A	0.03%
1996	11.00%	11.80%	N/A	0.80%
1997	10.25%	11.27%	N/A	1.02%
1998	10.00%	9.41%	9.70%	-0.30%
1999	9.25%	10.70%	9.97%	0.72%
2000	9.50%	10.75%	10.12%	0.62%
2001	9.25%	9.38%	9.31%	0.06%
2002 ¹	N/A	9.73%	N/A	N/A
2003	9.42%	10.23%	N/A	0.81%
2004	9.15%	9.34%	9.25%	0.10%
2005	9.03%	10.78%	9.91%	0.88%
2006	8.80%	10.47%	9.64%	0.84%
2007	8.37%	10.73%	9.55%	1.18%
2008	8.62%	10.64%	9.63%	1.01%
2009	8.99%	11.89%	10.44%	1.45%
2010	9.50%	9.42%	N/A	-0.08%
2011	9.50%	10.15%	N/A	0.65%
2012	9.50%	10.12%	N/A	0.62%
2013	8.75%	9.12%	N/A	0.37%
2014	8.75%	9.54%	9.20%	0.45%

Notes:

¹ An approved revenue requirement did not exist in 2002

² Post-ESM only applicable for the years when FEI was under PBR (1998-2001, 2004 - 2009, 2014)

³ Variance calculated as column (c) - column (a) in PBR years; or column (b) - column (a) in non-PBR years

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1 1994

2 Lower revenue \$4.3 million, higher depreciation \$0.5 million; offset by lower O&M \$0.7 million
3 and lower interest expense \$0.2 million.

4 1996

5 Higher revenue \$1.4 million, lower interest expense \$0.7 million, tax permanent and timing
6 differences \$0.4 million and lower depreciation \$0.2 million.

7 1997

8 Higher revenue \$3.3 million, tax timing and permanent differences \$1.9 million, lower
9 depreciation \$0.6 million, lower interest expense \$0.4 million; offset by higher O&M \$2.1 million.

10 1999

11 Higher revenue \$1.4 million, O&M variance due to use of formula for setting allowed O&M \$1.3
12 million and tax shield on CCA \$0.4 million.

13 2000

14 O&M variance due to use of formula for setting allowed O&M \$1.2 million, higher revenue \$1.1
15 million and tax shield on CCA \$0.3 million.

16 2003

17 O&M variance \$5.2 million and lower depreciation \$0.7 million, tax timing differences \$0.4
18 million; offset by lower revenue \$1 million primarily due to lower late payment
19 charges/connection fees.

20 2005

21 O&M variance due to use of formula for setting allowed O&M \$6.3 million, lower depreciation
22 due to use of formula for setting allowed capital \$1.8 million and income tax timing differences
23 \$0.5 million; offset by lower revenue \$0.7 million primarily due to use of formula for setting late
24 payment charges/connection fees and tax shield on CCA \$0.6 million.

25 2006

26 O&M variance due to use of formula for setting allowed \$5.7 million and lower depreciation due
27 to use of formula for setting allowed capital \$1.7 million; offset by lower revenue \$1.4 million due
28 to lower volumes and use of formula for setting late payment charges/connection fees, and tax
29 shield on CCA \$0.7 million.

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1 2007

2 O&M variance due to use of formula for setting allowed \$6.6 million and lower depreciation due
3 to use of formula for setting allowed capital \$4.8 million; offset by lower revenue \$1.8 million due
4 to lower volumes and use of formula for setting late payment charges/connection fees, and tax
5 shield on CCA \$1 million.

6 2008

7 O&M variance due to use of formula for setting allowed \$4.7 million and lower depreciation due
8 to use of formula for setting allowed capital \$4.6 million; offset by lower revenue \$0.5 million due
9 to use of formula for setting late payment charges/connection fees, and tax shield on CCA \$1
10 million.

11 2009

12 O&M variance due to use of formula for setting allowed \$3.9 million and lower depreciation due
13 to use of formula for setting allowed capital \$3.5 million and prior year tax adjustments \$3.2
14 million; offset by lower revenue \$0.1 million due to use of formula for setting late payment
15 charges/connection fees, and tax shield on CCA \$0.5 million.

16 2011

17 Tax timing differences \$2.0 million, lower depreciation \$1.3 million due to the timing of capital
18 expenditures, lower interest expense \$1.3 million due to lower actual rate base and O&M
19 variance \$0.8 million mainly due to lower labour costs; offset by lower revenue \$1.2 million.

20 2012

21 O&M variance \$5.5 million mainly due to lower labour costs, lower interest expense \$0.3 million
22 due to lower actual rate base and tax timing differences \$0.3 million; offset by lower revenue
23 \$0.3 million.

24

25

26

27 2.3 In the context of the answer to question 2.2, please provide a list of FEI's current deferral
28 accounts and fully explain whether any were explicitly introduced to account for
29 deviations of actual from allowed ROEs.

30

31 **Response:**

32 Please refer to the following list which includes a listing of all approved or requested deferral
33 accounts currently utilized by FEI, as contained in the financial schedules of FEI's Annual
34 Review for 2016 Rates.

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- 1 None of the accounts listed below were explicitly introduced to account for deviations of actual
- 2 from allowed ROEs.

Margin Related Deferral Accounts

- Commodity Cost Reconciliation Account (CCRA)
- Midstream Cost Reconciliation Account (MCRA)
- Revenue Stabilization Adjustment Mechanism (RSAM)
- Interest on CCRA / MCRA / RSAM / Gas Storage
- Revelstoke Propane Cost Deferral Account
- SCP Mitigation Revenues Variance Account

Energy Policy Deferral Accounts

- Energy Efficiency & Conservation (EEC)
- NGV Conversion Grants
- Emissions Regulations
- On-Bill Financing Pilot Program
- NGT Incentives
- CNG and LNG Recoveries

Non-Controllable Items Deferral Accounts

- Pension & OPEB Variance
- BCUC Levies Variance
- Pension & OPEB Funding

Application Costs Deferral Accounts

- Various deferrals to recover costs of Regulatory Applications

Other Deferral Accounts

- Gas Asset Records Project
- BC OneCall Project
- Negative Salvage Provision/Cost
- TESDA Overhead Allocation Variance

Residual Deferred Accounts

- Various residual deferral accounts

Non-Rate Base

- Biomethane Variance Account
- KORP Feasibility Costs
- Huntingdon CPCN Pre-Feasibility Costs
- Amalgamation Regulatory Account
- 2014-2019 Earning Sharing Account
- Flow-Through Account
- Phase-In-Rider Balancing Account
- LMIPSU Development Costs
- PEC Pipeline Development Costs and Commitment Fees
- Rate Stabilization Deferral Account (RSDA)

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2.4 In its 2009 Decision, the BCUC stated

The Commission Panel agrees with Dr Booth that “significant risk adjustments” to US utility data are required in this instance to recognize the fact that TGI possesses a full array of deferral mechanisms which give it more certainty that it will, in the short-term, earn its allowed return than the *Value Line* US natural gas LDCs enjoy. The Commission Panel notes Dr. Booth’s suggestion that the risk premium required by US utilities is between 90 and 100 basis points more than utilities in Canada require may set an upper limit on the necessary adjustment. Accordingly, the Commission Panel will reduce its DCF estimate by between 50 and 100 basis points to a range of 9.0 percent to 10.0 percent, before any allowance for financing flexibility.

Does FEI judge the BCUC’s comments in 2009 as continuing to be applicable or does it feel that it has lost some regulatory protection since 2009? If the latter, please fully explain.

Response:

FEI believes that the overall regulatory framework and practices used in Canada and the U.S. are comparable and there is no need to adjust ROE estimates for any small differences in regulatory risks. As explained in Mr. Coyne’s response to AMPC IR 1.4.1, as long as the proxy group companies are chosen based on appropriate and reasonable criteria, it would be unusual for the slight differences in risk across all proxy companies to rise to the level of significance to warrant an adjustment to the estimated ROE. Furthermore, as stated in Mr. Coyne’s response to APMC-Concentric IR 1.4.2, new evidence since the 2012 GCOC application, such as the Moody’s September 2013 report titled “Proposed Refinements to the Regulated Utilities Rating Methodology and our Evolving View of US Utility Regulation”, demonstrate that the views on U.S. utility regulation are evolving towards FEI’s and Mr. Coyne’s long standing view that the regulatory framework in the U.S. and Canada are comparable, and as Mr. Coyne asserted in his response to APMC-Concentric IR 1.4.2, a risk adjustment to the U.S. DCF results is not warranted in this proceeding. The following is an excerpt from the above-mentioned Moody’s report:

“Based on our observations of trends and events, we propose to adopt a generally more favorable view of the relative credit supportiveness of the US utility regulatory environment. Our updated view considers improving regulatory trends that include the

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1 *increased prevalence of automatic cost recovery provisions, reduced regulatory lag, and*
2 *generally fair and open relationships between utilities and regulators. While US state*
3 *regulatory environments have been characterized by a process that is more openly*
4 *adversarial than some other global jurisdictions, there have been very few instances*
5 *where eventual regulatory outcomes deviated enough from the established regulatory*
6 *framework to severely undercut utility creditworthiness. In the few instances where*
7 *inconsistent regulatory decisions have led to serious credit stress, courts have proved to*
8 *be a reliable secondary support for utility credit worthiness through rulings that mandate*
9 *that regulatory decisions must follow the established regulatory framework.”*

10
11 Appendix A of Mr. Coyne’s evidence includes a more detailed discussion of the existing
12 regulatory frameworks in his U.S. proxy group of companies.

13 Regarding the second part of the question, as to whether FEI feels it has lost some regulatory
14 protection since 2009, FEI’s view is that the relevant point of comparison is not 2009 but rather
15 2012. FEI’s views on its regulatory risk changes since 2012 are set out in Appendix C where
16 FEI states “FEI has thus assessed its overall regulatory risk as being similar to what it was in
17 2012 with the potential to be higher over the term of the PBR.” A full explanation for this
18 assessment is provided on pages 73 to 77 of Appendix C.

19
20
21
22 2.5 Is FEI aware that its witness Mr. Coyne, in a current hearing for Newfoundland Power
23 rates, described the BCUC as the most supportive regulator in Canada based on his
24 interpretation of DBRS comments? Does FEI disagree with this assessment? If so fully
25 explain the basis for the disagreement.

26
27 **Response:**

28 There is no preamble to this information request and the question does not specify which
29 proceeding it is referring to. In any case, FEI was not aware of this statement.

30 Mr. Coyne’s evidence in Appendix B does compare the regulatory frameworks in BC, Alberta,
31 Ontario and Quebec. As stated in Mr. Coyne’s evidence these jurisdictions have comparable
32 regulatory frameworks and deferral mechanisms.

33

34

35

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2.6 Would FEI agree that long run risks eventually become short run risks and it is up to the regulator to then manage those risks so that regulatory protection is the most important aspect of risk for a regulated utility? If not, please fully explain why not?

Response:

As discussed in response to AMPC-Concentric IR 1.3.1, some aspects of long-term risk such as political risk related to the provincial and local governments' efforts to promote energy efficiency and curb GHG emissions will eventually manifest themselves in key indicators such as lower use per customer, decline in throughput, loss of market share and capture rate. However this does not mean that long-term risk will eventually become short-term risk. Long-term and short-term risks are distinct concepts. As stated in response to BCUC IR 1.4.1, certain factors within FEI's business risk categories impact investors' short-term expectations (i.e. they can be categorized as short-term risk) while others are long-term risk factors. Short-term risk relates to a company's ability to earn a fair return on invested capital and manage year-to-year variability in earnings while long-term risk is comprised of factors that may negatively impact long-term viability of the utility and impair the ability of shareholders to fully recover their invested capital.

Regulatory mechanisms such as deferral accounts are used by many regulators to reduce year-to-year variability in earnings and hence to mitigate short-term risk related to the return on capital. However long-term risks such as provincial policies and Aboriginal rights and title issues are exogenous to a regulator's jurisdiction. Regulators are able to respond to these risks through increasing cost of capital or introducing accelerated capital recovery mechanisms to permit a return on and of capital over time.

2.7 FEI discusses the economic conditions in Canada, but not BC. Would FEI accept that currently the economic forecast for BC is the most favourable of any Canadian province? If it disagrees with that assessment please file a full provincial forecast for 2016-18.

Response:

The premise of the question is incorrect. FEI has discussed both the economic conditions of BC and Canada and has provided economic indicator forecasts for the four major provincial economies, including BC, in Table C-5 of its evidence.

The TD Economics October 2015 Provincial Forecast provides the following statement regarding the state of the economy in various Canadian provinces:

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“Across all other regions, the medium-term outlook can be characterized as continued moderate and steady growth. British Columbia, Ontario and Manitoba are projected to top the growth charts. These regions are well positioned to capitalize on rising export demand. In Ontario and B.C., surging home resale markets will also provide an added lift to consumer spending in the near term”.

TD Economics’ updated forecast for various provinces is provided in the figure below:



2.8 In terms of its common equity ratio FEI states (page 17) “An increase in the common equity percentage is further supported by a comparison of FEI’s financial metrics to its Canadian utility peers and the continued upward trend in FEI business risk.”

- a) Please confirm that both Union Gas and Enbridge Gas Distribution Inc (EGDI) are both allowed 36% common equity by the OEB. Please indicate whether FEI judges them to be appropriate comparators and discuss in detail why they are or are not.

Response:

FEI confirms the common equity ratios of both companies. This information was presented in Table 16 of Mr. Coyne’s evidence. The appropriateness of these utilities as comparators was discussed on pages 84 and 85 of Mr. Coyne’s evidence in Appendix B.

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- b) ATCO Gas is currently allowed 38% common equity by the AUC. Please indicate whether FEI judges ATCO Gas to be an appropriate comparator and discuss in detail why it is or is not.

Response:

FEI confirms that ATCO Gas' allowed common equity component is 38%. This information was presented in Table 16 of Mr. Coyne's evidence. The appropriateness of ATCO Gas as a comparator was discussed on pages 83 and 84 of Mr. Coyne's evidence in Appendix B.

- c) Gaz Metro is currently allowed 38.5% common equity by the Regie. Please indicate whether FEI judges GMI to be an appropriate comparator and discuss in detail why it is or is not.

Response:

FEI confirms that Gaz Metro is currently allowed 38.5% common equity by the Regie. This information was presented in Table 16 of Mr. Coyne's evidence. In addition, as explained on page 83, footnote 127 of Mr. Coyne's evidence, Gaz Metro's capital structure includes a 7.5 percent deemed preferred share component that does not require the payment of dividends to a preferred shareholder prior to the payment of common equity shareholders. The appropriateness of Gaz Metro as a comparator was discussed on pages 86 and 87 of Mr. Coyne's evidence in Appendix B.

- 2.9 In the 2012 GCOC, FEI's witness Ms. McShane produced the following table showing penetration of natural gas in each of the provinces where Union, EGDI, GMU and ATCO Gas are located. Please update this table, or alternatively confirm the penetration rates remain basically the same.

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Table 4

Residential Market Share Natural Gas and Electricity (2009)							
<u>British Columbia</u>		<u>Alberta</u>		<u>Ontario</u>		<u>Quebec</u>	
<u>Natural Gas</u>	<u>Electric</u>	<u>Natural Gas</u>	<u>Electric</u>	<u>Natural Gas</u>	<u>Electric</u>	<u>Natural Gas</u>	<u>Electric</u>
49.5%	43.4%	82.1%	16.9%	62.4%	29.2%	8.2%	68.5%

Source: Natural Resources Canada, Comprehensive Energy Data Base

Response:

Please find the updated table below.

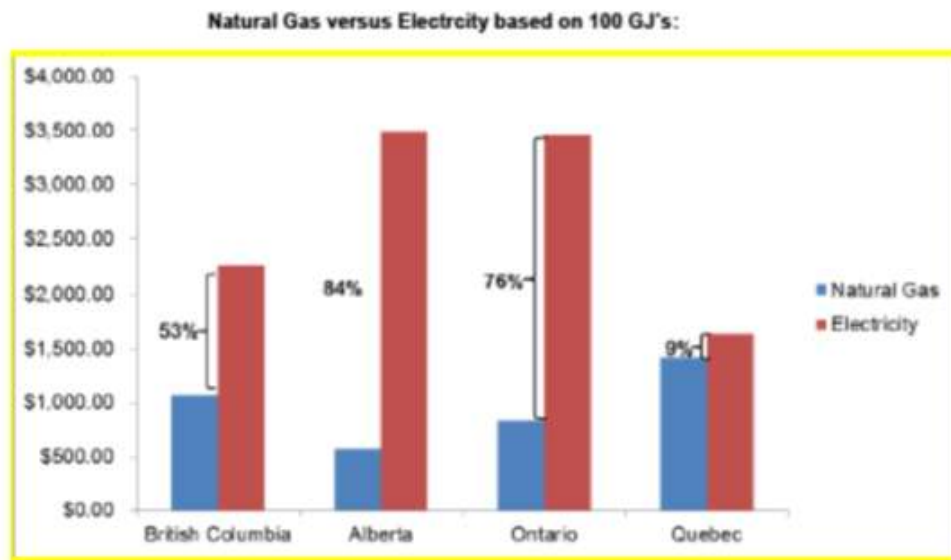
Residential Energy Use by fuel-type (2012)

	British Columbia		Alberta		Ontario		Quebec	
	Natural gas	Electricity	Natural gas	Electricity	Natural gas	Electricity	Natural gas	Electricity
Energy use (PJ)	78.2	68.1	168.2	37.8	308.7	120.6	22.7	226.5
Percentage	48.7%	42.4%	77.7%	17.5%	60.7%	23.7%	6.5%	64.4%

Source: Natural Resource Canada, Comprehensive Energy Data Base

2.10 In terms of price competitiveness in the BCUC GCOC 2012 hearing, in answer to BC Util Cust-FBC IR 4.2, FEI produced the following table.

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- a) Can FEI confirm that this is the same table at C-23 and that the competitiveness of natural gas has increased from 53% to 59% and that this cost comparison includes all costs, including carbon taxes etc.

Response:

Please note that the table shown in the preamble above was provided by FEI in response to BCUC IR 1.101.2 in the GCOC Stage 1 Proceeding, not in FEI's response to BC Utility Customers IR 1.4.2.

The table shown in the preamble above is the same as Figure C-12 in the Application (not Table C-23 which does not exist), with the exception that the table above is based on an annual use rate of 100 gigajoules; and Figure C-12 in the Application is based on an annual use rate of 90 gigajoules, however this does not materially affect the comparison of the two charts. Note, however, that FEI has filed an update to Figure C-12 in the response to BCUC IR 1.24.1.1 and confirms that the update in that response shows a differential of 59% for Vancouver, BC.

All rates are exclusive of applicable taxes and franchise fees, however the rate for FEI Mainland (representative of the Vancouver, BC Natural Gas column in Figure C-12 of the Application) is inclusive of the BC Carbon Tax.

- b) Does FEI judge this to indicate lower risk for FEI at the moment? Please fully explain your response.

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1 **Response:**

2 The operating costs differential between natural gas and electricity was provided in section 5.1.2
3 of Appendix C as part of the Commodity Price Risk section. As indicated in FEI's Application
4 and Appendix C, FEI assesses that the commodity price risk is slightly lower than 2012 levels.
5 However the risk relating to the overall energy prices remains similar to how it was
6 characterized by FEI in 2012 as the lower commodity price risk is offset by the higher
7 commodity price volatility risk. In addition, as explained on page 38 of Appendix C, the marginal
8 improvements in commodity price differential do not lead to improvements in overall
9 competitiveness of natural gas versus electricity or other alternative fuels because the improved
10 price competitiveness of natural gas continues to be muted by non-price factors. In other
11 words, non-price factors such as a higher capital cost differential for natural gas appliances (as
12 presented on page 34 of Appendix C) and relatively new developments such as mandatory
13 connection provisions being contemplated in certain municipalities (either through rezoning
14 requirements or bylaw) or updates to building codes that limit FEI's ability to attract or retain
15 customers (as explained in the political risks section of Appendix C) offset the impact of lower
16 commodity price risk and limit FEI's ability to compete on a price basis alone. As such, FEI
17 asserts that the relative improvements in operating cost differential between natural gas and
18 electricity do not indicate that FEI's overall business risk is lower.

19

20

21

22 c) Please produce the same comparison for 2009.

23

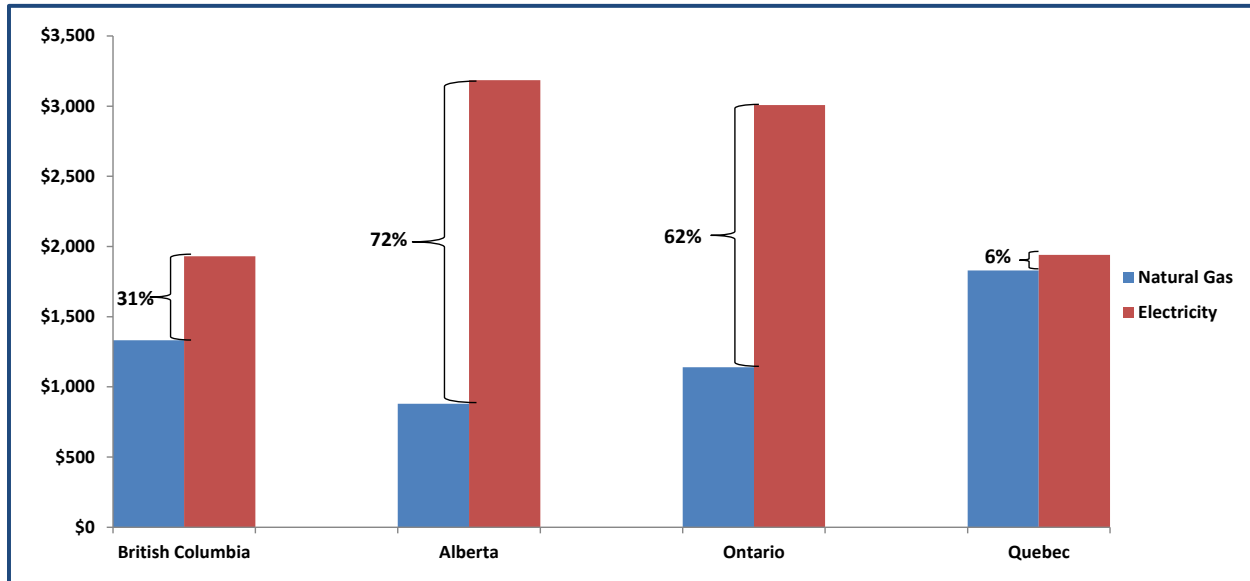
24 **Response:**

25 Please refer to the chart below which provides the same comparison for the year 2009. Please
26 refer to the response to AMPC IR 1.2.10a which clarifies that the table shown in the preamble
27 above was provided by FEI in response to BCUC IR 1.101.2 in the GCOC Stage 1 Proceeding,
28 not in FEI's response to BC Utility Customers IR 1.4.2.

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1

Residential Operating Cost Differences between Natural Gas and Electricity



2

Assumptions:

- Electricity rates are as per the Hydro-Québec *Comparison of Electricity Prices in Major North American Cities* for rates in effect April 1, 2009
- Natural gas rates are as at January 1, 2009.
- The efficiency of gas equipment is assumed to be 90% relative to 100% for electricity to determine equivalent electricity
- Estimated bills are calculated based on an annual use rate of 100 GJs
- All bills are exclusive of applicable franchise fees and taxes (with the exception of the BC Carbon Tax for Vancouver, BC)

4

5

6

7 2.11 In the 2009 GCOC FEI produced the following cost comparison. Please update the
8 information to include all years from 1998 to as current as possible. Does FEI judge the
9 competitiveness of natural gas in BC to be worse or better than in 2009 when the BCUC
10 increased its common equity ratio from 35% to 40%?

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Figure 3.1.1
Residential Annual Natural Gas and Electric Energy Costs in the Lower Mainland 1998 - 2009



Response:

Please refer to Attachment 2.11 for the updated cost comparison of FEI Mainland residential natural gas rates and BC Hydro residential electric rates.

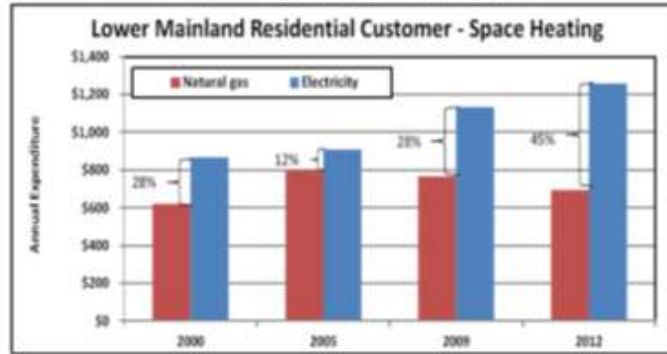
FEI does agree that the price competitiveness of natural gas has improved since 2009. This improvement is a result of the decrease in natural gas commodity prices and an increase in electricity rates. Commission Order G-75-13 dated May 10, 2013 regarding the Generic Cost of Capital Stage One Proceeding decreased FEI's common equity component from 40% to 38.5% effective January 1, 2013.

Please also refer to the response to BCUC IR 1.24.1.2.

2.12 In answer to BC Util Cust-FBC IR 4.2 in the 2012 GCOC hearing, FEI provided the following cost comparison for someone in the Lower Mainland using natural gas for heating. Please update this table for 2015 and discuss any major changes that indicate changes in FEI's business risk.

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Figure 1: Estimated Annual Expenditure for FEI Lower Mainland Residential Customer – Natural Gas and Electricity for Space Heating

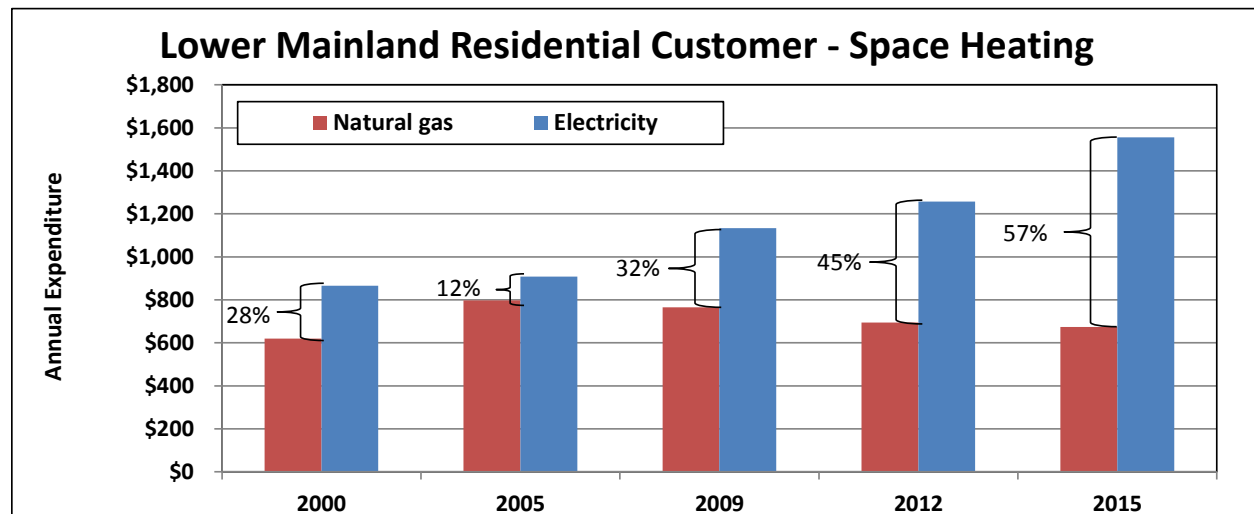


As per the figure 1 above, the operating cost advantage of natural gas over electricity in terms of annual expenditure space heating is about 45% in 2012. This compares to about 28% in 2000, 12% in 2005, and 28% in 2009. Therefore, since 2005, the operating cost advantage of natural gas over electricity has improved for space heating.

Response:

The requested update is provided in the figure below.

As can be seen, the operating cost differential between natural gas and electricity for residential space heating has increased from 45 percent in 2012 to 57 percent in 2015. For discussions regarding the impact of this change on FEI's business risk, please refer to FEI's response to APMC IR 1.2.10b.



Notes:

- Estimated residential bills are based on prevailing rates on July 1 of each specified year with the exception of 2015, where FEI rates are effective August 1, 2015
- The estimated bills have been calculated by FEI and may differ from actuals

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3. Assumes 90% efficiency for natural gas vs. 100% for electricity for space heating application
4. BC Hydro rate is inclusive of the 5% deferral account rate rider
5. The operating cost advantage for 2009 has been updated from 28% to 32%, it was incorrectly stated in the version of the chart from 2012

2.13 In the 2012 GCOC hearing FEI provided several reports from its consulting actuaries that directly related to capital market conditions and associated forecasts. Please provide the latest versions of the following reports and any updated reports that become available prior to the hearing:

- 1) Mercer's Capital Market Outlook.
- 2) Mercer's fearless forecast: a survey of Canadian and global capital markets and industry trends.
- 3) AON-Hewitt Capital Market Report.

Response:

FEI does not engage Mercer or AON Hewitt as consulting actuaries for capital market forecasts, rather FEI consults Mercer on certain pension and benefit components and to perform certain administrative and actuarial functions related to the Corporation's pension programs.

However, the requested reports were obtained and are provided in Attachment 2.13.

Please also refer to the response to BCUC IR 1.3.2, where FEI discusses that pension returns are not relevant to the assessment of FEI's requested ROE.

Attachment 1.2b

BC Gas Utility Ltd.

September 29, 1994

	<u>Trend</u>	<u>Debt Rated</u>
"A"	Negative	Purchase Money Mortgages
"A"	Negative	Unsecured Debentures & Medium Term Notes
Pfd-3	Stable	First Preferred Shares

Tom Fairbrother
Kent Wideman
(416) 593-5577

Summary The long term "A" ratings of BC Gas Utility Ltd. ("the Utility") are confirmed with a negative trend. This negative trend reflects the uncertain regulatory environment and the fact that coverage ratios remain at the low end of the acceptable range for this rating. Also, shorter term gas supply contracts may influence security of gas supply. The Utility received a harsh regulatory decision recently from the British Columbia Utilities Commission ("BCUC") which reduced the rate of return for 1994 to 10.65% on a common equity component of 33%. The negative impact of the low allowed rate of return is partly offset by the fact that the risk of the Utility has been significantly reduced through the implementation of stabilization accounts that remove the majority of the "weather risk" which it previously faced. Despite the unfavourable regulatory ruling on the allowed rate of return, which is likely to adversely affect earnings mainly in 1994, the longer term outlook for the Utility still remains reasonable. Given the strong population growth and a reasonably strong economy in B.C., the fundamentals for rate base and earnings growth, based on customer additions and growing gas demand, remain favourable.

Rating Considerations Strengths: (1) The risk of the Utility has been reduced slightly through the implementation of stabilization accounts which remove the majority of the weather risk which was previously faced by the Utility. (2) The B.C. economy is booming as a result of the ongoing immigration of people to the province. Residential consumers favour gas as the most economical and environmentally friendly source of energy. Challenges: (1) The regulatory decision carried some unfavourable components. The 10.65% return on common equity permitted by the BCUC is low compared to other utilities. However, this low rate partly reflects the reduction in risk associated with the implementation of the stabilization accounts. (2) Supply risk has increased as a result of increased demand for natural gas as a result of increased competition in the gas industry, and a BCUC decision which requires the Utility to reduce its weighted average gas supply contracts from a 10 year to a 4 year rolling average. Although it will take a number of years for the Utility to make the transition to the 4 year rolling average, there is some risk that four-year contracts may expire before new undeveloped supplies can be brought on stream and existing supplies may be committed. This could expose the Utility and its customers to higher gas costs and greater supply risk, especially given the difficulty in obtaining adequate storage capacity or peak shaving facilities. (3) Longer term, it is likely that the electricity industry may be deregulated. Thus, gas may compete more closely with electricity over time. Therefore, it will be critical for the Utility to manage its competitive position so as to remain a lowest cost provider of energy.

Regulation In December of 1993 the BCUC authorized, on an interim basis, an 11.2% return on a 33% common equity component. Subsequently the Utility participated in a joint rate of return hearing to determine rates of return on common equity and capital structure. On June 10/94 the BCUC released its decision for BC Gas, setting the return on common equity at 10.75% on a 33% equity component which was later further reduced by 10 basis points to 10.65%. The low allowed rate of return is due largely to the fact that the BCUC based its decision on a low forecast for 1994 long-term Canada bond yields of 7.75%. A formula was also approved for the determination of the ROE for 1995, the calculation being based on the 1995 forecast of long-term Government of Canada bond yields prevailing in late November 1994. Therefore the 1995 allowed rate of return should be

much more reasonable. The low rate of return in 1994 reflects the BCUC's opinion that the Utility is a low risk, high grade utility. The low risk assessment is due partly to the implementation of the gas cost reconciliation account ("GCRA") and the revenue stabilization account mechanism ("RSAM"). The GCRA effectively allows the utility to pass on any fluctuations in gas price to the customer. The RSAM with no deadband stabilizes the Company's margin from variances between actual and forecast use-per-account for residential and commercial customers during the months of November to March. During this period a deferral account balance will accumulate any surplus or shortfall in revenues resulting from volume variances. The surplus or shortfall will be amortized over a three year period. Thus 1/3 of the net balance will be allocated to recovery in applicable rates in the following year.

Earnings Earnings before unusual items in 1993 increased 51% to \$41.2 million compared to \$27.3 million in 1992. The increase in earnings was primarily due to unusually warm weather experienced in 1992. For the first six months of 1994 earnings were down 13% to \$30.7 million. The main reasons for the drop in earnings during the first six months of 1994 was that there was a lower permitted rate of return on common equity (ordered by the BCUC) compared with the corresponding period in 1993. Partially offsetting the negative impact of the lower rate of return on equity were the move to seasonal pricing for all customer classes on January 1/94 as directed by the BCUC, and the growth in the rate base of 12%. Seasonal pricing results in the Utility's customers paying increased delivery rates during the 5 winter months (Nov.-Mar.) and decreased rates during the remaining summer months. Under normal weather conditions, the seasonal rate structure will have no impact on annual net earnings.

Earnings growth is expected to slow in 1994, due to the lower allowed rate of return of 10.65%. Earnings volatility will be less of a factor in the future, however, due to the Utility's stabilization accounts. Somewhat offsetting the lower allowed ROE, will be the growth in rate base. With over \$900 million in capital expenditure planned over the next 5 years, subject to regulatory approval, the rate base is expected to grow at an average 10% per year, which should assure future earnings growth.

Balance Sheet The Utility's balance sheet improved slightly in 1993 with debt at year end of 64.46% of capitalization, down slightly from the previous year, and cash flow to debt improving to 0.11 in 1993 from 0.06. Debt levels are expected to increase, as capital spending is expected to remain high in the foreseeable future. The capital expenditure program is projected to total \$900 million over the next five years, to meet the growing demand for natural gas resulting from strong population growth. Given that cash flow net of dividends only funded 33.3% of capital expenditure in 1993 and the BCUC decision to limit the equity component to 33%, most capital expenditure must be funded through the issue of debt and to a lesser extent through equity injections from BC Gas Inc (the parent company). Interest and fixed charges coverage will be negatively impacted by the low allowed ROE in 1994, however, coverage ratios should improve in 1995 with the automatic rate adjustment mechanism in place, as it will allow the Utility to earn a higher rate of return (i.e. 12% given current long-term Canada bond yields).

The Company BC Gas Utility Ltd. is the largest natural gas utility in British Columbia; and is 100% owned by BC Gas Inc. <

BC Gas Utility Ltd.

March 30, 1995

	<u>Trend</u>	<u>Debt Rated</u>
R-1 (low)	Stable	Commercial Paper

Tom Fairbrother
Paul Holman
(416)593-5577

Summary The commercial paper rating of BC Gas Utility Ltd. ("The Utility") is confirmed at R-1 (low) with a Stable trend. The balance sheet weakened somewhat in 1994, with debt levels rising to 65% of capitalization, cash flow to debt decreasing to 0.08, and interest coverage decreasing to 1.59 from 1.80. Income based coverage ratios weakened largely as a result of the low allowed rate of return, 10.65% on a 33% common equity component, allowed by the British Columbia Utilities Commission ("BCUC") in 1994. The balance sheet also weakened due to a high level of capital spending, as cash flow net of dividends only covered 20.6% of this amount. The negative aspects associated with its 1994 regulatory decision, were offset somewhat by allowing The Utility to implement a number of stabilization accounts which remove the majority of the weather risk that it previously faced. The balance sheet should strengthen somewhat in 1995 as the BCUC has approved a 12% rate of return for the year. Given the strong population growth and a reasonably strong economy in British Columbia, the fundamentals for rate base and earnings growth, based on customer additions and growing gas demand, also remain favourable.

Rating Considerations Strengths: (1) The risk of the Utility has been reduced through the implementation of stabilization accounts which remove the majority of the weather risk which it previously faced. (2) The BC economy is booming as a result of the ongoing immigration of people to the province. Residential consumers favour gas as the most economical and environmentally friendly source of energy. Challenges: (1) The regulatory decision carried some unfavourable components. The 10.65% return on common equity permitted by the BCUC in 1994 caused coverage and cash flow ratios to fall significantly. However, these ratios are expected to improve in 1995 as the Utility has been approved a 12% return on common equity. (2) Risk has increased as a result of a BCUC decision which requires The Utility to reduce its weighted average gas supply contracts from a 10 year to a 4 year rolling average. Although it will take a number of years for The Utility to make the transition to the 4 year rolling average, there is some risk that four-year contracts may expire before new undeveloped supplies can be brought on stream and existing supplies may be committed. This could expose The Utility and its customers to higher gas costs and greater supply risk, especially given the difficulty in obtaining adequate storage capacity or peak shaving facilities. (3) Longer term, it is likely that the electricity industry may be deregulated. Thus, gas may compete more closely with electricity over time. Therefore, it will be critical for the Utility to manage its competitive position so as to remain a low cost provider of energy.

Regulation In December of 1993 the BCUC authorized, on an interim basis, an 11.2% return on a 33% common equity component. Subsequently, the Utility participated in a joint rate of return hearing to determine rates of return on common equity and capital structure. On June 10, 1994 the British Columbia Utilities Commission (BCUC) released its decision for BC Gas, setting the return on common equity at 10.75% on a

33% equity component which was later further reduced by 10 basis points to 10.65%. The low allowed rate of return is due largely to the fact that the BCUC based its decision on a low forecast for 1994 long-term Canada bond yields of 7.75%. A formula was also approved for the determination of the ROE for 1995, the calculation being based on the 1995 forecast of long-term Government of Canada bond yields prevailing in late November 1994 plus a risk premium of 290 basis points. Using this mechanism the 1995 allowed rate of return will return to a more reasonable level of 12%. The relatively low risk premium reflects the BCUC's opinion that The Utility is a low risk, high grade utility. The low risk assessment is due partly to the implementation of the gas cost reconciliation account ("GCRA") and the revenue stabilization account mechanism ("RSAM"). The GCRA effectively allows the utility to pass on any fluctuations in gas price to the customer. The RSAM with no deadband stabilizes the Company's margin from variances between actual and forecast use-per-account for residential and commercial customers during the months of November to March. During this period, a deferral account balance will accumulate any surplus or shortfall in revenues resulting from volume variances. The surplus or shortfall will be amortized over a three year period. Thus, one-third of the net balance will be allocated to recovery in applicable rates in the following year.

Earnings Earnings before tax and non-recurring items decreased 22.6% in 1994 to \$43.3 million compared to \$56.0 million in 1993. The decrease in earnings was primarily due to the lower allowed rate of return on common equity of 10.65% (ordered by the BCUC) compared to 1993 when the achieved rate was 11.9%. Partially offsetting the negative impact of the lower rate of return on equity was the 7.1% growth in the rate base in 1994. When the higher allowed ROE of 12% is combined with the projected growth in rate base of 12.9%, earnings are expected to increase in 1995 by approximately \$10 million. With over \$670 million in capital expenditure planned over the next 5 years, subject to regulatory approval, the rate base is expected to grow at an average 7.8% per year, which should assure future earnings growth. Risk of earnings volatility caused by weather fluctuations is no longer an important factor due to the Utility's stabilization accounts.

Balance Sheet The Utility's balance sheet weakened somewhat in 1994 with debt at year end of 65.3% of capitalization, and cash flow to total debt falling to 0.08 in 1994 from 0.11. Debt levels are expected to increase, as capital spending is expected to remain high in the foreseeable future to meet the growing demand for natural gas resulting from strong population growth. Given that cash flow net of dividends only funded 20.6% of capital expenditure in 1994 and the BCUC decision to limit the equity component to 33%, most capital expenditure must be funded through the issue of debt and to a lesser extent through equity injections from BC Gas Inc (the parent company). Interest and fixed charges coverage was negatively impacted by the low allowed ROE in 1994, dropping to 1.59 and 1.35 respectively. However, coverage ratios should improve in 1995

with the improved rate of return of 12% allowed on common equity. Coverage ratios for the Utility have traditionally been exceptionally low largely due to the fact that its effective tax **The Company** BC Gas Utility Ltd. is the largest natural gas utility in British Columbia. The utility is 100% owned by BC Gas Inc.

rate is extremely low (-0.74% in 1994, -0.94% in 1993).

Principal Amount Limited to \$400 million. <

Terasen Gas Inc.

Report Date: June 22, 2005

Press Released: June 22, 2005

Previous Report: June 21, 2004

RATING

Rating	Trend	Rating Action	Debt Rated
R-1 (low)	Stable	Confirmed	Commercial Paper
A	Stable	Confirmed	Purchase Money Mortgages
A	Stable	Confirmed	MTNs & Unsecured Debentures

Nick Dinkha, CFA/Matthew Kolodzie, CFA
416-593-5577 x2314/x2296
ndinkha@dbrs.com

(All figures in Canadian dollars, unless otherwise noted.)

RATING HISTORY	Current	2004	2003	2002	2001	2000	1999
Commercial Paper	R-1 (low)	R-1 (low)	R-1 (low)	R-1 (low)	R-1 (low)	R-1 (low)	R-1 (low)
Purchase Money Mortgages	A	A	A	A	A	A	A
MTNs & Unsecured Debentures	A	A	A	A	A	A	A

RATING UPDATE

Terasen Gas Inc.'s ("Terasen Gas" or the "Company") overall performance has remained stable, in spite of the lower approved return on equity (ROE) during the past two years. The Company benefits from a supportive regulatory regime, which provides for various deferral accounts that allow for the recovery from, or remittance to, customers of variances from forecasts in: (1) prudently incurred gas costs, (2) residential and commercial customer use, and (3) interest rate fluctuations. In addition, deferral accounts are also used for funding both pension costs and insurance premiums. As a result, the Company is only exposed to variances from forecast with regard to industrial and transportation service customers, which is mitigated by the small proportion of net revenues – roughly 10% – that these customers account for.

Given Terasen Gas' business characteristics, the medium-term outlook for its financial profile remains stable. However, the Company's financial results will continue to be influenced by the performance-based regulatory (PBR) regime under which it operates. More specifically, cash flows would be negatively impacted if it is unable to achieve productivity improvements

and efficiencies, particularly in light of the higher productivity factor in the final two years of the PBR period (until 2007). However, DBRS notes that Terasen Gas has been successful in achieving the efficiencies necessary to maintain a stable financial profile, recently evidenced by the \$4.1 million in earnings contribution from operational efficiencies achieved through the integration of Terasen Gas Vancouver Island ("TGV") into the Company's operations.

Terasen Gas will continue to have the capacity to internally fund annual capital expenditures averaging about \$100 million; however, when combined with dividend payments to its parent the Company will require external financing to fund these combined expenses. As a result, the Company will continue to incur free cash flow deficits, funding these through dividend management and debt issuances, such that the deemed capital structure of 33% equity/67% debt is maintained. Key financial ratios are expected to continue to fluctuate within a narrow band in line with changes in working capital requirements, however, this does not pose any credit implications. Overall, the outlook remains stable.

RATING CONSIDERATIONS

Strengths:

- Operations are regulated, providing longer term earnings and balance sheet stability
- Existence of various deferral accounts, which provide additional financial stability
- Southern Crossing Pipeline provides access to alternative sources of gas supply
- Diversified customer base and strong franchise area

Challenges:

- Cash flow from operations insufficient to fund both capital expenditures and common dividends
- Low allowed ROEs versus Canadian peers
- Earnings are sensitive to the economic cycle and interest rates (through allowed ROEs)
- Competitive pressures from dual energy industrial users, low electricity rates
- Tax methodology results in unrecorded tax liabilities, weakens interest coverage

FINANCIAL INFORMATION

	12 mos. ended March 31, 2005	For the year ended December 31				
		2004	2003	2002	2001	2000
Fixed-charges coverage (times)	1.97	1.99	1.97	1.98	1.82	1.77
% debt in capital structure (1)	66.1%	65.8%	68.4%	67.9%	68.4%	67.3%
Cash flow/total debt (times) (1)	9.2%	9.7%	8.9%	9.3%	8.6%	7.7%
Cash flow/capital expenditures (times)	1.44	1.61	1.27	1.34	0.98	0.25
Allowed ROE (2)	9.03%	9.15%	9.42%	9.13%	9.25%	9.50%
Net income before extraordinary items (\$ millions)	71.8	70.8	70.4	67.1	67.2	61.9
Operating cash flow (\$ millions)	152.7	151.5	147.9	149.1	142.4	120.1
Total throughput volumes (bcf)	190.3	191.6	190.4	206.8	225.1	235.2

(1) All preferred shares (prior to 2000) were treated as debt equivalents. (2) 9.03% is for 2005.

THE COMPANY

Terasen Gas is the largest natural gas distributor in British Columbia, serving approximately 783,000 customers, or 90% of the province's natural gas users. The Company is wholly owned by Terasen Inc., however, the rating assigned to Terasen Gas is a stand-alone commercial rating.

AUTHORIZED PAPER AMOUNT Limited to \$500 million

Energy

DOMINION BOND RATING SERVICE

REGULATION

- Terasen Gas is regulated by the British Columbia Utilities Commission (“BCUC”). The regulatory environment in British Columbia remains among the more progressive in Canada, although the approved ROEs for Terasen Gas are the lowest among the gas distribution companies in Canada.
 - British Columbia-based utilities were among the first utilities in Canada to operate under incentive-based regulation.
- Terasen Gas’ allowed ROE is set annually according to the following formula:
 - 350 basis points above forecast long-term Government of Canada bond when yields are 6% or lower.
 - The formula also provides for annual adjustments capturing 80% of the change in yields when forecast yields are higher than 6%.
- Deemed equity has been set at 33% of total capital, which is below that of its Canadian peers.
- Terasen Gas has the following deferral accounts, which reduce short-term earnings fluctuations/risks:
 - The Gas Cost Reconciliation Account (GCRA): The Company is permitted to periodically, subject to BCUC approval, recover from, or remit to, customers any variances in gas prices from forecast. Historically, variances are amortized and recovered over a two-year to three-year period with price adjustments normally made on a semi-annual basis.
 - The GCRA was split into two new deferral accounts effective April 2004 to accommodate commodity unbundling: the Commodity Cost Reconciliation Account (CCRA) and the Midstream Cost Reconciliation Account (MCRA), which work the same way in terms of the refund/recovery mechanism, as for the GCRA.
 - Rate Stabilization Adjustment Mechanism (RSAM): Terasen Gas is permitted to accumulate the variances from forecast in use per customer for residential and commercial customers. The amounts are amortized and recovered over a two-year period. Terasen Gas is, however, still exposed to the economic cyclicity of non-RSAM customers, principally large-volume, industrial and transportation service customers, who account for roughly 10% of gas revenues.
 - Interest Rate Deferral Accounts, which smooth the impact of fluctuations in both short-term and long-term interest rates.
- Recovery of the deferral account balances in rates charged to customers led to a decline in the regulatory deferral accounts during the year.
 - During 2004, the net balances of the CCRA/MCRA, and RSAM accounts declined to \$14.1 million from \$38.5 million in 2003.
- In July 2003, the BCUC approved a negotiated settlement of a performance-based rate plan covering the 2004-2007 period.
 - Under the new plan, operating and maintenance costs and base capital expenditures are subject to an incentive formula reflecting increasing costs as a result of customer growth and inflation less a productivity factor equal to 50% of inflation during the first two years of the plan and 66% of inflation during the last two years of the plan.
 - The 50/50 sharing of earnings with customers above or below the allowed ROE that existed under the previous plan continues under this plan.
 - The new plan also includes ten service quality measures designed to ensure the maintenance of service levels, as well as setting out the requirements for an annual review process.
 - As part of the negotiated settlement, new deferral accounts were established for insurance premiums and pension costs incurred by Terasen Gas, providing additional stability to earnings and cash flows over the medium term.
- Over the past several years, work has been underway on gas commodity unbundling, which allows customers to purchase gas from the supplier of choice.
 - Effective May 1, 2004, Terasen Gas’ commercial customers were able to purchase gas from a different gas supplier beginning November 1, 2004.
 - Terasen Gas still provides delivery of the natural gas.
 - Of the 78,000 commercial customers eligible to participate in commodity unbundling, 2,067 had participated by December 2004.
 - Since gas costs are strictly a flow-through item (i.e. Terasen Gas does not make any profit on the sale of the commodity), unbundling is earnings-neutral and, therefore, has no impact on credit ratings

RATING CONSIDERATIONS

Strengths: (1) The regulatory environment within which the Company operates provides a relatively high degree of financial stability. Since 1996, the regulatory environment has consisted of formula-based ROEs and incentive-based regulation, which minimize regulatory lag, streamline the regulatory process, and encourage utilities to improve

operating efficiencies. The framework within which Terasen Gas operates allows for the recovery from, or remittance to, customers of variances from forecast, through deferral accounts, for a large number of items. This helps to smooth earnings and reduce business and operating risks. All of these deferral accounts are amortized and recovered

in future rates. However, these can artificially inflate interest coverage ratios due to timing factors (i.e. during periods of warmer-than-normal temperatures), but the impact is reversed as deferral balances are recovered.

(2) The Southern Crossing Pipeline project (“SouthernX”), which became operational in November 2000, provides the Company with access to lower cost alternative sources of gas supply from Alberta. This is especially favourable during periods of high natural gas prices. Terasen Gas is also exploring opportunities to cost-effectively expand the pipeline through such initiatives as the Inland Pacific Connector project – a proposal to extend the SouthernX pipeline from Oliver to the regional natural gas trading hub of Sumas, near Vancouver.

(3) The Company has a diversified customer base and has limited exposure to a single customer, which reduces earnings volatility. Residential customers account for over 60% of gas revenues, commercial customers for just over 30% of gas revenues, and industrial customers about 10% of gas revenues. In addition, Terasen Gas serves a strong franchise area (Vancouver), which is densely populated.

Challenges: (1) The Company has consistently generated insufficient cash flow from operations to internally fund both its capital expenditures and dividend payments. This has not resulted in a deterioration of the Company’s credit quality and Terasen Gas is able to manage its dividend payment to its parent in order to maintain its capital structure. In the event that the Company requires significant equity contributions, it relies on its parent for support. However, Terasen Gas is rated on a stand-alone basis, and its financial strength and business profile is not impacted by activities at its parent company, Terasen Inc., currently rated A (low), R-1 (low).

(2) Terasen Gas has historically had the lowest allowed ROEs relative to all other gas distribution utilities in

Canada. This has resulted in generally weaker financial ratios relative to its Canadian peers.

(3) The Company’s earnings and cash flows are mildly sensitive to the economic cycle, and to changes in interest rates through allowed ROEs. Industrial customers, who account for just over 10% of gas revenues, are sensitive to the economic cycle. In terms of interest rates, a 25 basis point change in allowed ROEs would impact net earnings by about \$1.9 million. The allowed ROE for 2005 is set at 9.03%, compared to 9.15% for 2004 and the impact on net earnings from this reduction in ROE would be about \$1 million, resulting in relatively flat year-over-year earnings.

(4) In times of high natural gas prices, the Company faces reduced gas throughputs on the industrial side. In addition, the Company faces ongoing competitive pressures on the residential side from the low electricity rates in British Columbia due to the dominance of low-cost, hydro-based generation. In addition, the trend in housing starts, while remaining strong, has shifted from single-family dwellings to multi-family dwellings, for which natural gas has a lower penetration rate. However, with rising electricity prices in B.C., the competitive pressures have become much lower, with gas actually having a 10%-15% price advantage over electricity. In addition, in October 2004, the BCUC approved a rate increase for BC Hydro effective April 1, 2004 – the first rate increase since 1993.

(5) The use of the taxes payable method of taxation (typical of rate-regulated utilities) has resulted in an unrecorded future income tax liability of \$215.8 million as at December 2004. The recovery of this liability in future rates depends on regulation. In addition, this method results in lower revenue collections, thereby reducing operating income and weakening coverage ratios, as the Company collects taxes as paid.

EARNINGS AND OUTLOOK

	12 mos. ended	For the year ended December 31				
(\$ millions)	March 31, 2005	2004	2003	2002	2001	2000
Net revenues	498.2	498.2	500.4	497.0	489.2	420.9
EBITDA	293.6	294.2	298.1	303.0	307.5	261.8
EBIT	212.6	212.6	221.4	225.2	231.9	194.8
Gross interest expense	107.8	106.9	112.5	113.5	127.7	102.8
Net interest expense	107.2	106.4	111.9	112.5	124.4	91.1
Pre-tax income	105.4	106.2	109.5	112.7	107.5	103.7
Income taxes	33.6	35.4	39.1	45.6	40.3	41.8
Net income (before extras., after prefs.)	71.8	70.8	70.4	67.1	67.2	57.9
Net income	70.8	70.8	70.4	67.1	67.2	57.9
Return on avg. common equity (bef. extras.)	8.9%	9.0%	9.2%	8.8%	8.8%	8.4%

Summary:

- For the 12 months ended March 31, 2005, EBIT fell slightly due to lower overall consumption compared with the year ended December 31, 2003.
 - The lower approved ROE for 2004 of 9.15%, compared with 9.42% for the previous year, also contributed to lower results.
- Net income remained relatively flat during this period due to lower interest expense and lower taxes.

Outlook:

- Earnings are expected to remain relatively stable, with some modest growth potential.
- Terasen Gas faces the challenge of having to achieve continued productivity improvements and efficiencies over the next four years under the new performance-based rate plan.

- 2005 will be especially challenging given the significant decline in the allowed ROE to 9.03%, which is currently the lowest among all regulated gas distribution companies in Canada.
- The 50/50 sharing mechanism with customers on earnings above, or below, the permitted ROE minimizes the upside potential, but more important, minimizes downside risk.
- Over the longer term, Terasen Gas should benefit from the rising electricity prices in British Columbia, which will further improve the price competitiveness of gas versus electricity.
- As well, the Company continues to pursue operational efficiencies from the integration of TGVI, particularly with regard to the installation of a liquefied natural gas (LNG) storage facility on the island.
- This would provide additional transportation earnings for Terasen Gas.
- The completion of the 252 MW Duke Point power plant on Vancouver Island, expected in May 2007, will also provide Terasen Gas with additional earnings growth potential from greater throughput volumes.
 - Ongoing developments with the resort Municipality of Whistler to develop a sustainable energy strategy should provide further earnings growth for Terasen Gas.
- This project includes the construction of a natural gas pipeline from Squamish to Whistler, providing additional transportation earnings for the Company.

FINANCIAL RISK PROFILE AND OUTLOOK

	12 mos. ended For year ended Dec. 31					
(\$ millions)	March 31, 2005	2004	2003	2002	2001	2000
EBITDA	293.6	294.2	298.1	303.0	307.5	261.8
Net income before extraordinary items	71.4	70.8	70.4	67.1	67.2	57.9
Depreciation & amortization	76.1	81.6	76.7	77.8	75.6	67.0
Other non-cash adjustments	5.2	(0.9)	0.8	4.2	(0.4)	(4.8)
Cash Flow From Operations	152.7	151.5	147.9	149.1	142.4	120.1
Capital expenditures	(105.9)	(93.9)	(116.2)	(111.1)	(146.0)	(472.5)
Common dividends	(65.0)	(60.0)	(80.0)	(80.0)	(60.0)	(56.1)
Free Cash Flow Before W/C Changes	(18.2)	(2.4)	(48.3)	(42.0)	(63.6)	(408.5)
Working capital changes	(0.3)	15.5	(40.5)	(20.8)	(109.3)	119.6
Changes in rate stabilization account	37.1	24.4	38.2	71.0	2.4	(117.3)
Net Free Cash Flow	18.6	37.5	(50.6)	8.2	(170.5)	(406.2)
Acquisitions/divestitures	4.4	67.7	(3.7)	52.7	45.4	(10.9)
Other	0.0	(2.4)	0.0	0.0	0.0	0.0
Cash flow before financing	23	103	(54.3)	60.9	(125.1)	(417.1)
Net change in debt financing	(35.1)	(96.8)	52.1	(59.5)	94.4	376.3
Net change in pref. share financing	0.0	0.0	0.0	0.0	0.0	(75.0)
Net change in equity financing	0.0	0.0	0.0	0.0	0.0	141.1
Net Change in Cash	(12.1)	6.0	(2.2)	1.4	(30.7)	25.3
Cash flow/capital expenditures (times)	1.44	1.61	1.27	1.34	0.98	0.25
Cash flow/total debt (times)	9.2%	9.7%	8.9%	9.3%	8.6%	7.7%
% debt in the capital structure	66.1%	65.8%	68.4%	67.9%	68.4%	67.3%
Fixed-charges coverage (times)	1.97	1.99	1.97	1.98	1.82	1.77

Summary:

- Terasen Gas' financial profile has experienced a modest improvement over the past five years, despite the low allowed ROEs.
 - Fixed-charges coverage has improved to almost 2.0 times, and
 - Cash flow/debt has been has improved to over 9.0%.
- Although key financial ratios are low relative to Canadian peers, they are acceptable for the rating given the existence of the various deferral accounts and the high degree of stability of the ratios.
- Cash flow from operations remains insufficient to fully fund both capital expenditures and dividend payments to its parent.
 - However, the Company can manage its dividend payouts in order to maintain its capital structure, typically within BCUC-approved levels.
- Terasen Gas's capital structure has remained relatively stable, around the deemed capital structure of 33% common equity/67% debt.

Outlook:

- Terasen Gas' financial profile is expected to remain relatively stable over the medium term.
 - Operating cash flows and key financial ratios will continue to be pressured by the low permitted ROE in 2005 and could come under additional pressure if the Company is unable to achieve the productivity improvements and efficiencies required under the new performance-based rate plan.
- Cash flow from operations will continue to be insufficient to fund both annual capital expenditures and dividend payments under current dividend payout.
- However, free cash flow deficits are manageable.

LONG-TERM DEBT MATURITIES AND BANK LINES

Long-Term Debt Maturity Schedule – as at March 31, 2005
(\$ millions)

	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009 and beyond</u>
Long-term debt	397.2	122.2	102.2	190.2	62.1
% of total	33.1%	10.2%	8.5%	15.8%	5.2%

Summary:

- The Company has 364-day revolving committed lines of credit totalling \$500 million, which are used to support its \$500 million commercial paper program, as well as for general corporate purposes.
- As of December 31, 2004, Terasen Gas had \$132 million of commercial paper and banker's acceptances outstanding.
 - Consequently, it had \$368 million available on its committed lines of credit.
- In February 2005, the Company issued \$150 million of 30-year medium-term notes (MTN) at an interest rate of 5.90%.
 - In April 2004, Terasen Gas issued \$150 million of medium-term note debentures at an interest rate of 6.50%.
 - Proceeds were used repay some existing MTNs and for general corporate purposes.

Outlook:

- Maturities are reasonably well staggered over the next few years.
- The Company anticipates issuing another \$250 million in fixed income during 2005.
 - In addition, the Company plans on issuing \$250 million in long-term debt at sister company TGVI in order to refinance an existing \$215 million credit facility maturing in January 2006, as well as to repay some intercompany debt from Terasen Inc. to TGVI.
 - The Company also plans on negotiating a new credit facility at TGVI to provide financing for LNG capital expenditures.
- While there is some refinancing risk in 2005, DBRS expects that the Company will have little difficulty refinancing, or securing additional financing for its operations.

Terasen Gas Inc.

Balance Sheet

(\$ millions)

	As at March 31, 2005	As at December 31 2004	2003		As at March 31, 2005	As at December 31 2004	2003
Assets				Liabilities & Equity			
Cash	122.3	1.7	0.0	Short-term debt	102.5	107.0	357.2
Accounts receivable	296.4	252.9	318.0	A/P + accruals	310.0	301.4	316.6
Inventories	96.1	151.5	113.6	L.t.d. due in one year	357.2	397.2	2.2
Prepays + other	4.9	5.7	5.8	Current Liabilities	769.7	805.6	676.0
Rate stabilization accts	10.8	13.8	6.3	Deferred taxes	0.5	0.5	0.5
Current Assets	530.5	425.6	443.7	Deferred gain	80.7	80.2	51.9
Net fixed assets	2,311.5	2,260.0	2,285.8	Long-term debt	1,201.2	1,051.4	1,297.3
Rate stabilization accts	28.5	27.9	32.2	Debt equiv. pref.	0.0	0.0	0.0
Deferred charges	25.2	25.5	23.9	Preferred equity	0.0	0.0	0.0
Long-term rec. + investments	8.0	8.2	5.1	Shareholders' equity	851.6	809.5	765.0
Total	2,903.7	2,747.2	2,790.7	Total	2,903.7	2,747.2	2,790.7

Ratio Analysis

Liquidity Ratios

	12 mos. ended March 31, 2005	2004	2003	2002	2001	2000	1999
Current ratio	0.69	0.53	0.66	0.53	0.61	0.69	0.51
Accumulated depreciation/gross fixed assets	20.2%	21.0%	20.1%	18.8%	17.5%	16.7%	18.7%
Cash flow/total debt (1)	9.2%	9.7%	8.9%	9.3%	8.6%	7.7%	9.0%
Cash flow/capital expenditure	1.44	1.61	1.27	1.34	0.98	0.25	0.85
Cash flow-dividends/capital expenditures	0.83	0.97	0.58	0.62	0.56	0.14	0.37
% debt in capital structure (1)	66.1%	65.8%	68.4%	67.9%	68.4%	67.3%	67.2%
Average coupon on long-term debt	7.23%	7.23%	7.29%	7.81%	7.76%	7.86%	8.40%
Deemed common equity	33%	33%	33%	33%	33%	33%	33%
Common dividend payout (before extras.)	104.5%	84.7%	113.6%	119.2%	89.3%	96.9%	126.5%

Coverage Ratios

EBIT interest coverage	1.97	1.99	1.97	1.98	1.82	1.90	2.27
EBITDA interest coverage	2.72	2.75	2.65	2.67	2.41	2.55	3.01
Fixed-charges coverage	1.97	1.99	1.97	1.98	1.82	1.77	1.90

Earnings Quality/Operating Efficiency and Statistics

EBIT margin, excluding cost of natural gas	42.7%	42.7%	44.2%	45.3%	47.4%	46.3%	47.6%
Net margin (excluding preferred dividends)	14.4%	14.2%	14.1%	13.5%	13.7%	13.7%	12.7%
Return on avg. common equity (bef. extras.)	8.9%	9.0%	9.2%	8.8%	8.8%	8.4%	8.3%
Allowed ROE (3)	9.03%	9.15%	9.42%	9.13%	9.25%	9.50%	9.25%
Degree days – % normal (interior)	-	97.6%	97.6%	103.0%	94.6%	99.9%	94.7%
Degree days – % normal (coastal)	-	95.3%	95.3%	102.6%	102.3%	103.1%	101.6%
Customers/employees	-	670	626	574	594	521	515
Customer growth	1.1%	1.5%	0.8%	0.9%	0.7%	0.9%	1.9%
Operating costs/avg. customer (\$) (2)	316	313	306	302	282	253	238
Rate base (\$ millions)	-	2,258	2,259	2,234	2,208	1,690	1,637
Rate base growth	-	0.0%	1.1%	1.2%	30.7%	3.2%	5.0%
Kilometres of pipelines	-	43,776	43,777	43,196	37,430	37,197	36,581
Rate base/km of pipeline (\$ thousands)	-	51.6	51.6	51.7	59.0	45.4	44.8
Rate base/throughput volumes (\$ millions per bcf)	-	11.8	11.9	10.8	9.8	7.2	7.4

(1) All preferred shares (prior to 2000) treated as debt equivalents. (2) Operating costs exclude municipal and property taxes. (3) 9.03% for 2005.

	12 mos. ended March 31, 2005	2004	2003	2002	2001	2000	1999
Throughput Volumes							
Residential	62.272	60.050	62.126	67.906	62.849	69.531	70.344
Commercial	34.758	34.585	35.217	38.378	38.107	42.170	43.705
Small industrial	4.938	4.425	5.057	5.870	7.585	9.301	7.314
Large industrial	0.186	0.361	0.271	1.084	0.632	1.445	1.896
Total Natural Gas Sales Volumes	102.155	99.420	102.671	113.236	109.173	122.447	123.260
Transportation service	56.858	56.708	56.257	60.230	53.006	55.535	58.334
Throughput under fixed-price contracts	31.266	35.488	31.424	33.321	62.939	57.250	38.468
Total Throughputs (billions of cubic feet)	190.279	191.617	190.352	206.787	225.118	235.232	220.061
Customers							
Residential	90%	703,800	712,304	701,335	694,787	687,375	682,401
Commercial	10%	77,100	77,624	77,013	77,894	78,756	78,948
Small industrial	0%	500	416	470	488	515	602
Large industrial	0%	100	45	50	61	61	66
Transportation	0%	1,500	1,741	1,512	1,328	1,141	856
Total (thousands)	100%	783,000	792,130	780,380	774,558	767,848	762,873



Press Release

**Dominion
Bond
Rating
Service**

Date of Release: May 30, 2006

Industry : Energy

DBRS Confirms Terasen Gas Inc. at "A", R-1 (low)

Terasen Gas Inc.

<u>Rating</u>	<u>Trend</u>	<u>Rating Action</u>	<u>Debt Rated</u>
R-1 (low)	Stb	Confirmed	Commercial Paper
A	Stb	Confirmed	MTNs & Unsecured Debentures
A	Stb	Confirmed	Purchase Money Mortgages

Dominion Bond Rating Service ("DBRS") has today confirmed the ratings of Terasen Gas Inc. ("Terasen Gas" or the "Company") at "A" and R-1 (low) in light of the recent announcement of the proposal by Richard Kinder, Chairman of the ultimate parent company, Kinder Morgan, Inc. ("KMI"), and others, including management and various other private equity funds, to acquire all of the outstanding shares of KMI for US\$100 per share in cash in a US\$21.8 billion transaction, including assumed debt of US\$7.6 billion. The transaction is expected to close by year-end, pending KMI's independent directors' review and recommendation, as well as shareholder and regulatory approvals.

While the ratings of KMI have been placed "Under Review with Negative Implications" due to the estimated pro forma debt-to-capital increase to 67% (from a previous December 31, 2006, estimate of 57%) and impact on other credit ratios, the financial profile of Terasen Gas is not expected to be impacted at all. DBRS takes comfort in the regulatory ring-fencing imposed by the British Columbia Utilities Commission ("BCUC") as a condition of the acquisition by KMI of Terasen Inc. in December 2005 (former parent of Terasen Gas), which required, among other items: (1) maintenance of the BCUC-approved capital structure; (2) no common dividend payment without BCUC approval if the payment would violate condition 1; (3) no financial support or guarantees for non-regulated businesses; and (4) no transactions with affiliates that would violate BCUC guidelines, policies, or directives. The intent of the BCUC decision was to ensure that the public interest was protected and that Terasen Gas, along with other former Terasen Inc. utilities, would continue to operate as separate, stand-alone entities without parental influence.

For more information on this credit or on this industry, visit www.dbrs.com or contact us at: info@dbrs.com.

Nick Dinkha, CFA, MBA
416-593-5577 x2314
Assistant Vice President
ndinkha@dbrs.com

Matthew Kolodzie, CFA, P.Eng.
416-593-5577 x2296
Senior Vice President
mkolodzie@dbrs.com

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insight beyond the rating.

Terasen Gas Inc.

RATING

Rating	Trend	Rating Action	Debt Rated
R-1 (low)	Stable	Confirmed	Commercial Paper
A	Stable	Confirmed	Purchase Money Mortgages
A	Stable	Confirmed	MTNs & Unsecured Debentures

RATING HISTORY	Current	2006	2005	2004	2003	2002	2001
Commercial Paper	R-1 (low)	R-1 (low)	R-1 (low)	R-1 (low)	R-1 (low)	R-1 (low)	R-1 (low)
Purchase Money Mortgages	A	A	A	A	A	A	A
MTNs & Unsecured Debentures	A	A	A	A	A	A	A

RATING UPDATE

DBRS has confirmed the ratings of Terasen Gas Inc. (Terasen Gas or the Company), as listed above, all with Stable trends. The rating confirmation reflects a reasonable regulatory environment and the Company's solid financial profile.

The regulatory environment continues to remain stable, providing a number of reasonable cost-recovery mechanisms, which combined with the rate-setting methodology, allow for a full recovery of all prudently incurred operating expenses and capital expenditures within a reasonable time frame. Although returns on equity (ROE) have declined in recent years (8.37% in 2007 versus 8.8% in 2006), the impact on earnings and cash flows is modest and is

largely offset by increases in the rate base and the equity component in the capital structure (35% since 2006, from 33% previously).

DBRS notes that the Company could undergo a change of ownership in light of Fortis Inc.'s (Fortis) proposal to acquire Terasen Inc. (owner of Terasen Gas) from Kinder Morgan Inc. (KMI). DBRS does not believe the proposed Fortis acquisition would impact Terasen Gas' credit profile as Terasen Gas debt holders would benefit from the strong regulatory protection that was put in place at the time of the KMI acquisition of Terasen Inc. in 2005 (ratings of Terasen Gas were confirmed shortly after Fortis's announcement). (Continued on page 2.)

RATING CONSIDERATIONS

Strengths

- Low business risk and reasonable regulatory framework
- Strong regulatory ring fencing
- Solid balance sheet and reasonable credit metrics
- Strong franchise area with a large customer base

Challenges

- Low and declining allowed ROEs
- Volume exposure in the industrial sector
- High natural gas prices increase competition
- Earnings remain flat despite increases in rate base

FINANCIAL INFORMATION

	12 mos. ended Sept 30, 2006	For the year ended December 31				
	2006	2005	2004	2003	2002	2001
EBIT interest coverage (1)	1.98	1.94	1.94	1.93	1.95	1.79
% debt in capital structure (1)	65.2%	67.6%	67.1%	69.4%	69.0%	69.4%
Cash flow/total debt (times) (1)	9.6%	8.9%	9.2%	8.5%	8.8%	8.2%
Cash flow/capital expenditures (times)	1.58	1.52	1.61	1.27	1.34	0.98
Allowed ROE	8.80%	9.03%	9.15%	9.42%	9.13%	9.25%
Net income before extraordinary items (CAD millions)	68.9	69.5	70.8	70.4	67.1	67.2
Operating cash flow (CAD millions)	160.4	156.7	151.5	147.9	149.1	142.4
Total throughput volumes (billions of cubic feet)	190.3	192.6	191.6	190.4	206.8	225.1

(1) Includes operating leases

THE COMPANY

Terasen Gas is the largest natural gas distributor in British Columbia, serving approximately 816,000 customers or 90% of the province's natural gas users. The Company is a wholly owned subsidiary of Terasen Inc. [rated BBB (high), Under Review – Developing], which is wholly owned by Kinder Morgan, Inc. [rated BB, Under Review – Developing]. In February 2007, Fortis Inc. [rated BBB (high)] proposed to purchase Terasen Inc. The ratings assigned to Terasen Gas are predominantly on a stand-alone basis with no formal guarantees from the parent company.

AUTHORIZED PAPER AMOUNT Limited to \$500 million



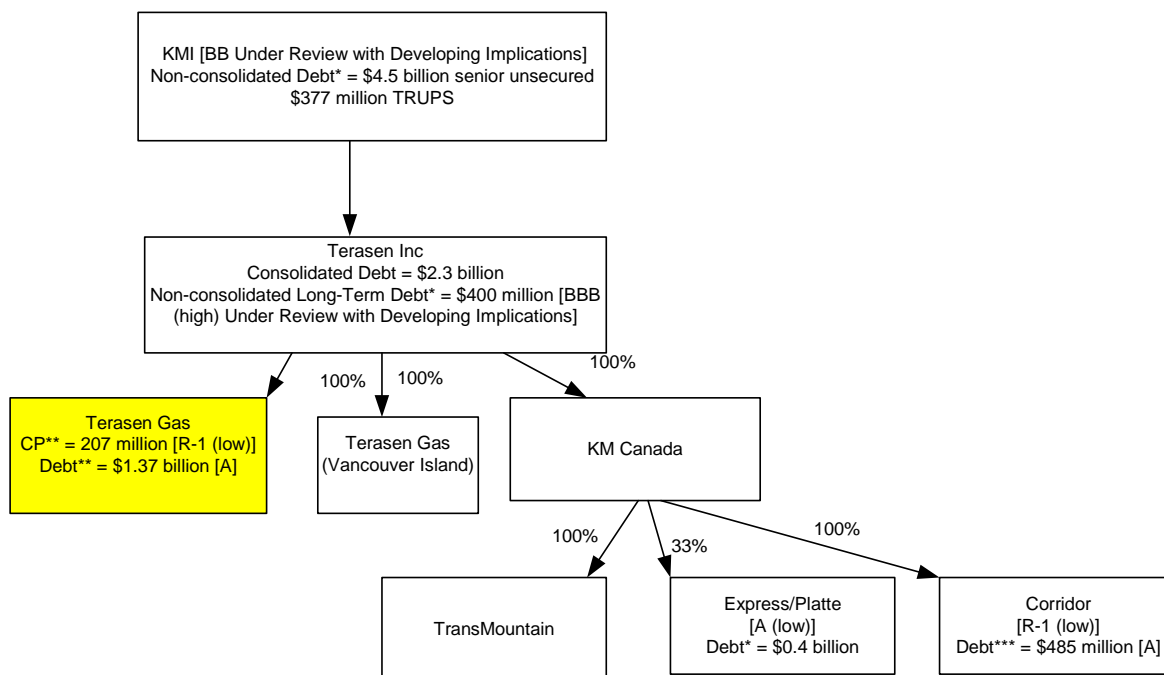
RATING UPDATE (Continued from page 1.)

Under the ring-fencing conditions, Terasen Gas must maintain at least the same level of equity as approved in the rate base (35% for 2007) and must obtain an approval from the British Columbia Utilities Commission (BCUC) before paying dividends to the parent if it can be reasonably expected that such dividends would increase the debt ratio in the capital structure over the approved level.

Terasen Gas' financial profile remains strong reflecting the following: (1) Credit metrics remain solid within the current rating category with EBIT interest coverage and cash flow-to-debt ratios at 1.98 times and 9.6%, respectively; and (2) no financial support from the parent is expected, as Terasen Gas continues to generate sufficient cash flow to meet its financial obligations and finance growth. Terasen Gas continues to benefit from low

business risk as it has limited exposure to volume risk in the residential and commercial segments, which is very critical to maintaining earnings and cash flow stability since gas consumption is very sensitive to the weather. Also, a large customer base in its strong franchise area allows Terasen Gas to continue to achieve a respectable level of operating efficiency, which is key to achieving the productivity factors (for profit and loss sharing) specified in the Performance-Based Rate plan (PBR). The ratings, however, are constrained by Terasen Gas' exposure to industrial and transportation volumes and low ROEs. DBRS notes that these constraints are largely mitigated due to (1) a growing demand in transportation services, (2) a robust provincial economy and (3) Terasen Gas' access to sources of low-cost and reliable natural gas supply.

SUMMARIZED ORGANIZATIONAL CHART



* A s at Dec 31, 2006

** As at Sep 30, 2006

*** As at Feb 28, 2007



REGULATION

Overview

Terasen Gas' rates of return, contractual agreements with customers, construction and operation of facilities, and cost recovery are regulated by the BCUC. DBRS finds the regulatory framework in British Columbia reasonable, reflecting the following factors:

Market Restructuring

- Beginning in November 2004, commercial customers were able to purchase gas from an alternative supplier. Residential customer services are expected to be unbundled in November 2007.
 - The cost of gas supply is passed on to customers. As a result, the cash flow impact is limited to the timing of recovery.

Returns on Equity

- Allowed ROE is set (by the BCUC) according to a formula and is reset annually.
 - The formula is based on a forecast of 30-year Canada Bonds plus a 3.90% risk premium. The forecast was 4.79% for 2006.
 - The risk premium is adjusted annually by 75% of the difference between 5.25% and the forecast yield on 30-year Canada Bonds.
 - For 2007, ROE for Terasen Gas declines to 8.37% from 8.80% in 2006, with an approved equity ratio remaining at 35% (35% in 2006, 33% in 2005).
 - DBRS believes that this ROE level is low (the lowest among gas distributors in Canada).

Performance-Based Rate Plan (PBR)

- In July 2003, the BCUC approved a negotiated settlement of a PBR plan covering the 2004–2007 period.
 - Under the PBR plan, operating and maintenance costs and base-capital expenditures are subject to an incentive formula, which reflects increasing costs as a result of customer growth and inflation less a productivity factor equal to 50% of inflation during the first two years of the plan and 66% of inflation during the last two years (2006 and 2007).
 - In February 2007, the Company filed an application with the BCUC to extend the current PBR period for another two years, through to 2009. The requested PBR is

materially same as the previously established PBR. A decision by the BCUC is expected sometime in late Q1 or early Q2 of 2007.

- The Company is entitled to a 50/50 sharing of earnings above or below the allowed ROE.
- New deferral accounts were established for insurance premiums and pension costs incurred by Terasen Gas. The deferred amounts will be recovered in future rates.

Cost Recovery Mechanisms

(1) Gas Cost Reconciliation Account (GCRA)

- The Company can periodically recover from (remit to) customers any differences between actual gas prices and forecast prices in the rates.
- Shortfalls (surpluses) are recorded in deferral accounts to be amortized and recovered from (or refunded to) customers over a two-year to three-year period. This exposes Terasen Gas to a recovery lag.
- However, price adjustments in the price forecast are made on a quarterly basis to better reflect current gas commodity prices. This serves to mitigate the impact of recovery lag.
- The GCRA was split into two new deferral accounts (commodity account and midstream account) effective April 2004 to accommodate commodity unbundling.
 - These two accounts work in the same way as the GCRA.

(2) Rate Stabilization Adjustment Mechanism (RSAM)

- Terasen Gas is permitted to accumulate the variances from forecast in use per customer for residential and commercial customers.
- The amounts are amortized and recovered over a two-year period. DBRS views the RSAM to be favourable to Terasen Gas. (For comparison, in Ontario, gas distribution companies are exposed to volume risk, which can be significant due to changes in the weather).
- Terasen Gas remains exposed to the economic cyclicity of non-RSAM customers, principally large-volume, industrial and transportation service customers, who account for 46% of throughput volumes.

(3) Interest-Rate Deferral Accounts

- The differences in actual financial costs and the costs in the forecasts are deferred and recovered.



- This account helps to smooth the impact of fluctuations in both short-term and long-term interest rates.

Regulatory Restrictions

The following conditions were imposed by the BCUC on Terasen Gas at the time KMI acquired Terasen Inc.

- Terasen Gas must maintain the equity in the capital structure at least at the deemed equity level approved by the BCUC (35% in 2007). Currently, the equity component in the Company's capital structure is at 35%, at the level approved by the BCUC.
- Terasen Gas must obtain approval from the BCUC before paying dividends to its parent if the paying of dividends can be reasonably expected to increase leverage above the approved level.
- The Company will not be allowed to lend to, guarantee or financially support any affiliates of Terasen Inc. or its non-regulated businesses.
- Terasen Gas will not be allowed to enter a tax-sharing agreement with any of its affiliates unless the agreement has been approved by the BCUC.
- Three of the four directors of the Company must be independent of management and any change in the current composition of the Board that would impact the independence of the Board members would require the approval of the BCUC.
- DBRS believes these conditions help to maintain Terasen Gas' capital ratios and credit metrics.

RATING CONSIDERATIONS

Strengths

(1) Terasen Gas is a regulated gas utility that operates within a reasonable regulatory framework. The Company has no exposure to commodity price risk (but is subject to a recovery lag), is allowed to timely recover all prudently incurred operating expenses and capital expenditures and is able to earn a reasonable return on its investments.

(2) The Company's balance sheet remains solid with leverage at 65% and EBIT interest coverage ratio at 1.98 times. These ratios are acceptable for the current rating category, given the Company's low business risk. Although the cash flow-to-debt ratio at 9.6% is slightly weak for an A rating, it has been very stable and has been supported by stable operating cash flows and strong regulatory ring-fencing.

(3) As part of its approval of the acquisition of Terasen Inc. by KMI, the BCUC imposed a number of conditions (as discussed in the Regulation section). These conditions are positive to Terasen Gas and are effective in insulating Terasen Gas from its parent's weaker financial profile.

(4) The Company serves a large customer base of more than 816,000, located in a stable and growing franchise area that includes the City of Vancouver. The customer mix is favourable with residential and commercial customers accounting for 90% of distribution revenues. There is no volume risk (but it is subject to a reasonable lag) associated with these customers.

Challenges

(1) Terasen Gas has had the lowest allowed ROE relative to all other gas distribution utilities in Canada. ROE declined to 8.37% in 2007 from 8.80% in 2006. In general, the decline in ROE is primarily due to the low interest-rate environment. Lower ROEs have a negative impact on earnings, but the impact is largely offset by a larger rate base.

(2) The Company is exposed to variances from forecast with regards to industrial, fixed-price contracts and transportation-service customers, who represent approximately 46% of throughput volumes (10% of revenues). This exposure, however, is mitigated because these customers are not as weather-sensitive and the forecast therefore tends to be more precise.

(3) High natural gas prices have a negative impact on the Company's throughputs on the industrial side. In addition, the Company faces ongoing competitive pressures on the residential side from low electricity rates in British Columbia due to the dominance of low-cost hydro-based generation.

(4) Earnings have not reflected increases in the rate base. Despite a growing rate base (\$2.5 billion at September 2006 compared to \$2.3 billion in 2004), EBIT has remained flat due to lower ROEs and a decline in total throughput volumes.



EARNINGS AND OUTLOOK

(CAD millions)	12 mos. ended	For the year ended December 31				
	Sept 30, 2006	2005	2004	2003	2002	2001
Net revenues	516.2	504.8	498.2	500.4	497.0	489.2
EBITDA	302.9	301.6	294.2	298.1	303.0	307.5
EBIT	220.1	222.4	212.6	221.4	225.2	231.9
Gross interest expense	108.3	111.7	106.9	112.5	113.5	127.7
Pre-tax income	112.4	111.3	106.2	109.5	112.7	107.5
Income taxes	43.5	41.8	35.4	39.1	45.6	40.3
Net income (before extras., after prefs.)	68.9	69.5	70.8	70.4	67.1	67.2
Net income	75.8	65.3	70.8	70.4	67.1	67.2
Return on avg. common equity (bef. extras.)	7.9%	8.4%	9.0%	9.2%	8.8%	8.8%
EBIT margin (net of gas costs)	43%	44%	43%	44%	45%	47%

Summary

- EBITDA and earnings have been flat over the last few years, reflecting lower ROEs and a decline in throughput volumes due to a decrease in customer use, offset by higher earnings from growth in the rate base.
 - Earnings are largely derived from distribution services, transportation services and fixed-price customers.
 - Distribution volumes account for more than 54% of total throughputs, while transportation and fixed-price volumes account for roughly 30% and 16%, respectively.
 - Transportation earnings have increased in recent years while industrial volumes have declined.
 - Residential and commercial volumes remain very stable.
- Natural gas price volatility has no impact on earnings since the costs are passed through to customers.
 - The recovery of gas-supply costs is through a deferral account, which smoothes out the impact of volatile natural gas prices on cash flows.
 - The Company has no volume risk with its residential and commercial customers, which mitigates the impact of weather on earnings.
- The 2004–2007 performance-based rate plan provides for a 50/50 sharing (above and below allowed ROE).
 - EBIT margins have been stable under the PBR plan.
 - Interest expense has been stable.

Outlook

- EBIT in 2007 is expected to increase moderately (assuming normal weather conditions) since the impact of lower ROE (8.37% for 2007 compared to 8.80% for 2006) is expected to be offset by a higher rate base for 2007.
- The current PBR plan expires at the end of 2007. Terasen Gas has filed an application to extend the PBR regulation through 2009. A decision by the BCUC is expected in late Q1 or early Q2 of 2007.



FINANCIAL RISK PROFILE AND OUTLOOK

	<u>12 mos. ended</u> For year ended Dec. 31					
(CAD millions)	<u>Sept 30, 2006</u>	<u>2005</u>	<u>2004</u>	<u>2003</u>	<u>2002</u>	<u>2001</u>
Net income before extraordinary items	68.9	69.5	70.8	70.4	67.1	67.2
Depreciation & amortization	82.8	79.2	81.6	76.7	77.8	75.6
Other non-cash adjustments	8.7	8.0	(0.9)	0.8	4.2	(0.4)
Cash Flow From Operations	160.4	156.7	151.5	147.9	149.1	142.4
Capital expenditures	(101.4)	(103.3)	(93.9)	(116.2)	(111.1)	(146.0)
Common dividends	(15.0)	(60.0)	(60.0)	(80.0)	(80.0)	(60.0)
Free Cash Flow Before W/C Changes	44.0	(6.6)	(2.4)	(48.3)	(42.0)	(63.6)
Working capital changes	12.8	(46.4)	15.5	(40.5)	(20.8)	(109.3)
Changes in rate stabilization account	25.8	1.9	24.4	38.2	71.0	2.4
Net Free Cash Flow	82.6	(51.1)	37.5	(50.6)	8.2	(170.5)
Acquisitions/divestitures	7.2	(42.2)	67.7	(3.7)	52.7	45.4
Other adjustment/comprehensive	(10.2)	(1.8)	(2.4)	0.0	0.0	0.0
Cash flow before financing	79.6	(95.1)	102.8	(54.3)	60.9	(125.1)
Net change in debt financing	(37.5)	109.0	(96.8)	52.1	(59.5)	94.4
Net change in pref. share financing	0.0	0.0	0.0	0.0	0.0	0.0
Net change in equity financing	0.0	0.0	0.0	0.0	0.0	0.0
Net Change in Cash	42.1	13.9	6.0	(2.2)	1.4	(30.7)
Total adjusted debt (CAD million) (1)	1,676	1,763	1,652	1,737	1,685	1,737
Cash flow/total debt (times) (1)	9.6%	8.9%	9.2%	8.5%	8.8%	8.2%
% debt in the capital structure (1)	65.2%	67.6%	67.1%	69.4%	69.0%	69.4%
EBIT interest coverage (times)	1.98	1.94	1.94	1.93	1.95	1.79

(1) Includes operating leases

Summary

- Terasen Gas has maintained a strong financial profile reflecting solid balance sheet and credit metrics. Cash flow from operations remains strong, supported by stable earnings.
- Free cash flow deficits have improved since 2004 reflecting a modest growth in operating cash flows, moderate levels of capital expenditures and a recent reduction in dividends to the parent.
 - Dividends were reduced to \$15 million for the 12 months ending September 2006, compared to \$60 million in 2005 and 2004.
 - Approximately 70% to 80% of capital spending is for maintenance.
- The capital structure remains relatively reasonable at 35%/65% and consistent with the approved level. EBIT interest ratio is solid at nearly 1.98 times; the cash flow-to-debt ratio is acceptable at 9.6%.
 - As part of conditions imposed by the BCUC for the acquisition of Terasen Gas, the Company must maintain its capital structure within the structure allowed in the rate base (35% equity in 2006 and 2007).
 - Dividends must be approved by the BCUC before they can be paid to the parent if it can be reasonably expected that if the payment of dividends would increase the debt-to-capital ratio above 65%.
- These factors are positive and help to maintain leverage and coverage ratios within the current rating category.
- Working capital fluctuations reflect gas price volatility. DBRS believes that the Company has strong liquidity to manage the working capital volatility.

Outlook

- Terasen Gas' financial profile is expected to remain relatively stable going forward, reflecting the following factors:
 - Operating cash flows are expected to grow modestly due to a larger rate base, which more than offsets the negative impact of lower ROE.
 - Capital expenditures are expected to be roughly between \$105 million and \$110 million in 2007.
 - Approximately 20% to 30% of capital expenditures are allocated to customer growth (including the \$37 million pipeline project from Squamish to Whistler, prior to the 2010 Winter Olympics).



- The Company is expected to manage its dividends to keep the capital structure within the approved 35%/65%. As a result, DBRS believes Terasen Gas' financial profile will remain stable, reflecting the following:
 - Terasen Gas will likely incur a very modest free cash flow deficit, but the deficit will be manageable.
 - Leverage should remain at the 65% level.
 - EBIT interest coverage and cash flow-to-debt ratios should remain stable within the current rating category.

LONG-TERM DEBT MATURITIES AND BANK LINES

Long-Term Debt Maturity Schedule – as at September 30, 2006 (DBRS estimate)

(CAD millions)

	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>Thereafter</u>	<u>Total</u>
Long-term debt	251.8	189.8	61.6	1.8	843	1,348

Summary

- The debt-repayment schedule, although moderate in amounts, is significantly higher in 2007 and 2008, compared to 2009 and 2010.
- DBRS believes that Terasen Gas should be able to refinance its maturing debt in 2007 and 2008, given its solid financial profile.
- The Company's liquidity position is strong, reflecting sizable credit facilities (\$500 million), stable cash flow from operations, and moderate short-term obligations.
- On June 21, 2006, Terasen Gas entered into a \$500 million three-year revolving credit facility, extendible annually for an additional 364 days at the option of the lenders. This facility replaces five bilateral facilities aggregating \$500 million and includes terms and conditions similar to the facilities replaced.
 - The facility's financial covenants include a debt-to-capital ratio of 75%. As of September 30, 2006, Terasen Gas was in compliance with the covenants.
- The credit facility is used to support its \$500 million commercial paper (CP) and support working capital.
- Terasen Gas is subject to Material Adverse Change (MAC) effect. However, the MAC clause is only applicable for renewing credit facilities, not for subsequent draw-downs from the facilities. DBRS views this as favourable to the company liquidity.
- As of September 31, 2006, Terasen Gas had \$207 million of commercial paper and bankers' acceptances outstanding.
 - Letters of credit (related to unfunded pension funds) outstanding at September 2006 was \$43.6 million.



Appendix: Operating Data

		12 mos. ended	For year ended December 31					
		<u>Sept 30, 2006</u>	<u>2005</u>	<u>2004</u>	<u>2003</u>	<u>2002</u>	<u>2001</u>	<u>2000</u>
Throughput Volumes								
Residential		62.272	62.668	60.050	62.126	67.906	62.849	69.531
Commercial		34.758	35.307	34.585	35.217	38.378	38.107	42.170
Small industrial		4.938	3.793	4.425	5.057	5.870	7.585	9.301
Large industrial		0.186	0.271	0.361	0.271	1.084	0.632	1.445
Total Natural Gas Sales Volumes	54%	102.155	102.039	99.420	102.671	113.236	109.173	122.447
Transportation service	30%	56.858	57.702	56.708	56.257	60.230	53.006	55.535
Throughput under fixed-price contracts	16%	31.266	32.869	35.488	31.424	33.321	62.939	57.250
Total Throughputs (billions of cubic feet)		190.279	192.610	191.617	190.352	206.787	225.118	235.232
Customers								
Residential	90%	734,386	723,898	712,304	701,335	694,787	687,375	682,401
Commercial	10%	79,330	78,497	77,624	77,013	77,894	78,756	78,948
Small industrial	0%	356	396	416	470	488	515	602
Large industrial	0%	41	45	45	50	61	61	66
Transportation	0%	2,150	1,907	1,741	1,512	1,328	1,141	856
Total (thousands)	100%	816,263	804,743	792,130	780,380	774,558	767,848	762,873



Terasen Gas Inc.

Balance Sheet

(CAD millions)

	As at Sept 30, 2006	As at December 31 2005	2004		As at Sept 30, 2006	As at December 31 2005	2004
Assets				Liabilities & Equity			
Cash	47	16	2	Short-term debt	207	313	107
Accounts receivable	152	401	253	L.t.d. due in one year	22	122	397
Inventories	221	178	152	A/P	348	319	252
Prepaid expenses	2	4	4	Tax payables	22	30	19
Rate stabilization accts	122	13	14	Rate stabilization acct.	0	48	28
Current Assets	544	612	424	Current Liabilities	599	832	803
Net fixed assets	2,336	2,329	2,260	Long-term debt	1,348	1,230	1,051
Rate stabilization accts	26	26	28	Deferred credits	40	46	33
Deferred charges	34	35	36	Deferred taxes	70	59	60
Long-term rec. + investments	10	10	10	Shareholders' equity	893	846	810
Total	2,950	3,013	2,757	Total	2,950	3,013	2,757

Ratio Analysis**Liquidity Ratios**

	12 mos. ended Sept 30, 2006	2005	2004	2003	2002	2001
Current ratio	0.91	0.74	0.53	0.66	0.53	0.61
Accumulated depreciation/gross fixed assets	20.2%	21.9%	21.0%	20.1%	18.8%	17.5%
Cash flow/total debt (1)	9.6%	8.9%	9.2%	8.5%	8.8%	8.2%
Cash flow/capital expenditure	1.58	1.52	1.61	1.27	1.34	0.98
Cash flow-dividends/capital expenditures	1.43	0.94	0.97	0.58	0.62	0.56
% debt in capital structure (1)	65.2%	67.6%	67.1%	69.4%	69.0%	69.4%
Average coupon on long-term debt	7.24%	7.23%	7.23%	7.29%	7.81%	7.76%
Approved common equity	35%	33%	33%	33%	33%	33%
Common dividend payout (before extras.)	21.8%	86.3%	84.7%	113.6%	119.2%	89.3%

Coverage Ratios

EBIT interest coverage (1)	1.98	1.94	1.94	1.93	1.95	1.79
EBITDA interest coverage (1)	2.71	2.70	2.75	2.65	2.67	2.41
Fixed-charges coverage (1)	1.93	1.90	1.89	1.89	1.90	1.75
Debt/EBITDA	5.53	5.85	5.61	5.83	5.56	5.65

Earnings Quality

EBIT margin, excluding cost of natural gas	42.6%	44.1%	42.7%	44.2%	45.3%	47.4%
Net margin (excluding preferred dividends)	13.4%	13.8%	14.2%	14.1%	13.5%	13.7%
Return on avg. common equity (bef. extras.)	7.9%	8.4%	9.0%	9.2%	8.8%	8.8%
Allowed ROE (2)	8.80%	9.03%	9.15%	9.42%	9.13%	9.25%

Operating Statistics

Customers/employees	680	671	670	626	574	594
Customer growth	5.4%	1.6%	1.5%	0.8%	0.9%	0.7%
Operating costs/avg. customer (CAD)	320	304	313	306	302	282
Rate base (CAD millions)	2,516	2,406	2,310	2,281	2,234	2,208
Rate base growth	4.6%	4.2%	1.3%	2.1%	1.2%	
Kilometres of pipelines	43,775	43,775	43,776	43,777	43,196	37,430
Rate base/km of pipeline (CAD thousands)	57.5	55.0	52.8	52.1	51.7	59.0
Rate base/throughput volumes (CAD millions per bcf)	13.2	12.5	12.1	12.0	10.8	9.8

(1) Includes operating leases

(2) Approved ROE for 2007 is 8.37% with an equity ratio of 35%



Note:

All figures are in Canadian dollars, unless otherwise noted.

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Rating Report

Report Date:

May 27, 2009

Previous Report

May 20, 2008



Insight beyond the rating.

Terasen Gas Inc.

Analysts

Michael Caranci

+1 416 597 7304

mcaranci@dbrs.com

Adeola Adebayo

+1 416 597 7421

aadebayo@dbrs.com

Darryl Brown

+1 416 597 7459

dbrown@dbrs.com

The Company

Terasen Gas Inc. (TGI or the Company) is the largest natural gas distributor in British Columbia, serving approximately 834,000 customers, representing 90% of the province's natural gas users. The Company is 100% owned by Terasen Inc. (rated BBB (high)), which is a wholly-owned subsidiary of Fortis Inc. (rated BBB (high)). The ratings assigned to TGI are based predominantly on a stand-alone basis.

Recent Actions

February 20, 2009

Rates New Issue

May 13, 2008

Rates New Issue

April 14, 2008

Confirmed with a Stable Trend

Rating

Debt	Rating	Rating Action	Trend
Commercial Paper	R-1 (low)	Confirmed	Stable
Purchase Money Mortgages	A	Confirmed	Stable
MTNs & Unsecured Debentures	A	Confirmed	Stable

Rating Update

DBRS has confirmed the Purchase Money Mortgages and the MTNs & Unsecured Debentures ratings of Terasen Gas Inc. (TGI or the Company) at "A" and its Commercial Paper rating at R-1 (low), all with Stable trends. The rating confirmations reflect TGI's low business risk natural gas distribution operations, a favourable regulatory environment with strong ring-fencing provisions, a strong franchise area with a large customer base and a stable financial profile.

The regulatory environment continues to remain stable, and provides for a number of cost-recovery mechanisms which, when combined with the rate-setting methodology, allows for a full recovery of all prudently incurred operating expenses and capital expenditures within a reasonable time frame. The Company's performance based regulation (PBR), which had been in place from 2004 to 2007, was extended through to 2009. TGI recently filed an application to review its allowed return on equity (ROE) and capital structure, and is expected to file a new revenue requirement application with the continuation of its numerous deferral accounts. Although the ROE has been in general decline (8.47% in 2009 as opposed to 9.42% in 2003) because of the low interest rate environment, the impact on earnings and cash flow has been modest and is largely offset by increases in the rate base, higher approved equity thickness in the capital structure (35% since 2006, up from 33% previously), incentive earnings, and stable levels of debt.

TGI continues to maintain a stable financial profile and credit metrics (albeit weaker than its peers), reflecting the regulated nature of its operations and its limited gas-cost exposure. DBRS expects lower customer growth than in the past few years due to a slowing economy, fewer new housing starts, and a shift in the housing mix to more multi-family dwellings. TGI is expected to focus on retaining customers through expanded energy conservation and efficiency programs. (Continued on page 2.)

Rating Considerations

Strengths

- (1) Low business risk and supportive regulatory framework
- (2) Strong regulatory ring-fencing provisions
- (3) Reasonable balance sheet and stable credit metrics
- (4) Strong franchise area with a large customer base

Challenges

- (1) Earnings and cash flow affected by lower ROE
- (2) Long-term competitiveness of natural gas relative to alternative energy sources
- (3) Volume exposure in the industrial and transportation segment
- (4) Loss of PBR incentive earnings upon expiry

Financial Information

	12 mos. ended Mar. 31 '09	For the year ended December 31			
	2009	2008	2007	2006	2005
EBIT interest coverage (1)	1.89	1.88	1.95	2.00	1.94
% debt in capital structure (1)	63.6%	66.4%	66.5%	64.7%	67.6%
Cash flow/total debt (times) (1)	9.6%	8.8%	8.4%	9.7%	8.9%
Cash flow/capital expenditures (times)	1.21	1.24	1.35	1.47	1.52
Net income bef. extras (CAD millions)	79	78	70	68	70
Operating cash flow (CAD millions)	151	152	146	160	157

(1) Includes operating leases

Terasen Gas Inc.

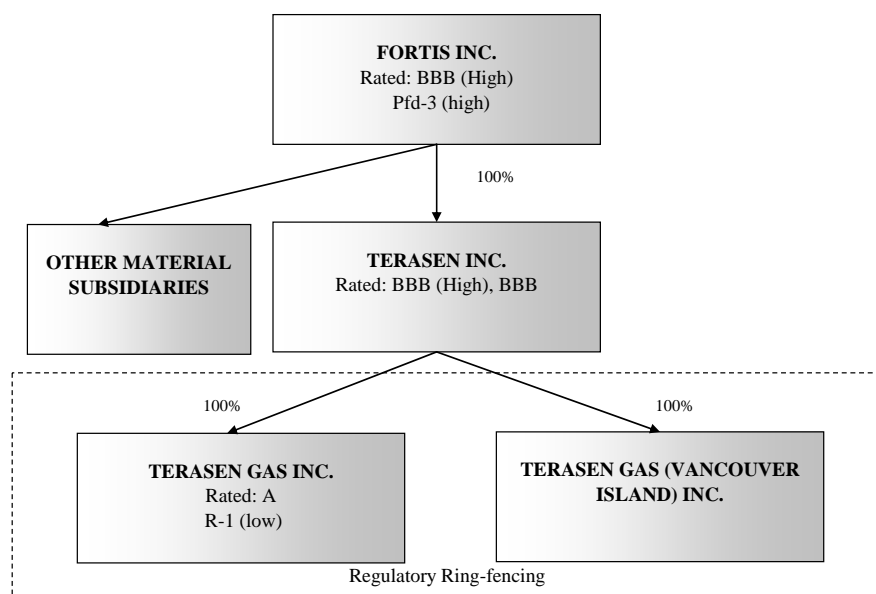
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Rating Update (Continued from page 1.)

Minimal to modest free cash flow deficits are expected over the medium term, attributable to the replacement and refurbishment of existing infrastructure (which is expected to go into the rate base in a timely manner) and modest customer growth. Any deficits would be expected to be financed with a combination of the \$500 million revolving bank facility (\$389 million available at March 31, 2009) and long-term debt issuance. TGI's balance sheet should remain stable over the medium term as the Company is expected to manage its dividends to maintain its capital structure within the regulatory-approved debt-to-equity ratio of 65% to 35%.

The Company's credit metrics have historically remained consistent and are expected to continue to do so, with minor variability. DBRS notes that while TGI's credit metrics are weaker than those of similarly-rated gas distribution peers, this has historically been offset by the Company's more stable credit metrics and business risk profile. The Company continues to maintain a price advantage relative to electricity, the primary competitor to natural gas. The current weak gas pricing environment both improves TGI's competitiveness, and reduces working capital and liquidity requirements. TGI's financial strength and credit profile over the longer term will depend to an extent on the continued competitiveness of natural gas relative to alternative energy sources (mainly electricity).

Simplified TGI Ownership and Rating Chart



Rating Considerations Details

Strengths

(1) TGI benefits from having all its operations in a low-risk, stable regulated environment within a supportive regulatory framework. TGI operates under a full cost-of-service recovery regime, with deferral accounts existing to stabilize earnings and to adjust for the recovery/refund of shortfalls/overages of natural gas costs from/to customers. TGI has no exposure to commodity costs (subject to a recovery lag) as natural gas costs are fully passed on to customers, with quarterly adjustments.

(2) Regulatory ring-fencing conditions imposed on TGI in the April 30, 2007, British Columbia Utilities Commission (BCUC) order approving acquisition of Terasen Inc. by Fortis Inc. are viewed as positive for TGI's credit profile, offering protection from significant changes in its capital structure.

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(3) TGI maintains a stable balance sheet and credit metrics, reflecting the following: (a) a debt-to-capital ratio consistently in the mid-60% area; (b) an EBIT interest coverage ratio historically close to 2.0 times; and (c) a cash flow-to-debt ratio that has been in the 8% to 10% range over the past five years. While the EBIT coverage and cash flow-to-debt ratios are on the low end for an “A” rating compared with its gas distribution peers, historically TGI’s credit metrics have shown the most stability.

(4) TGI serves a large customer base of approximately 834,000, located in a stable franchise area that includes the city of Vancouver. The customer mix is favourable, with residential and commercial customers accounting for 90% of distribution revenues. There is no volume risk (but recovery lag exists) associated with this customer segment.

Challenges

(1) The approved ROE of 8.47% for 2009 (8.62% in 2008) is low and has been in gradual decline in recent years due to the low interest rate environment. Despite a modestly growing rate base (\$2.5 billion in 2008 compared with \$2.3 billion in 2004), earnings and cash flow have remained flat, largely as a result of the lower ROE. Under the current adjustment mechanism, approved ROEs could trend even lower in the future, depending on Government of Canada bond (Canada Bonds) yields.

(2) TGI’s earnings and financial profile over the longer term will largely depend on the competitive position of natural gas relative to alternative energy sources (mainly electricity) in British Columbia. Despite the significant increases in natural gas prices from 1999 through 2008, natural gas maintained a competitive advantage in terms of pricing compared with electricity. While gas prices have retreated significantly in 2009, it is expected that under reasonable gas price assumptions, TGI will remain competitive relative to electricity, with electricity prices expected to rise gradually in the medium term, according to BC Hydro.

(3) The Company is exposed to variances from forecasts when it comes to its industrial fixed-price contracts and transportation-services segments, which represent approximately 45% of throughput volumes (5% of revenues). However, this exposure is mitigated by the fact that their usage is less likely to be significantly affected by weather and is therefore more predictable. TGI conducts an annual survey of its industrial customer segment to minimize forecast variances in throughput volumes. Further mitigating this risk is the fixed demand charges derived from this segment.

(4) Under the PBR, TGI shares earnings above or below the allowed ROE on a 50/50 basis with customers. This sharing mechanism will expire along with the PBR, which will likely exert some downward pressure on earnings, as TGI’s incentive earnings averaged over \$10 million per year in 2007 and 2008.

Regulation

Regulatory Overview

- TGI is regulated by the BCUC on a test-year forecast basis under a rate-of-return/cost-of-service regime. TGI applies to the BCUC annually for approval of its forecast cost-of-service, throughput, revenue and capital additions.
- TGI’s cost of service includes the cost of purchased gas and the cost of gas transportation and distribution through the pipeline system, including operating, maintenance and administrative expenses (OM&A); depreciation of facilities; income and other taxes; and a return on equity.
- TGI purchases gas for resale, without markup, to residential and commercial customers; transportation customers and some large commercial and industrial customers arrange for their own gas supply and contract with TGI for the transportation of that gas.
- TGI’s rates are based on estimates of several items, such as natural gas sales volumes, cost of natural gas and interest rates. In order to manage the risks associated with some of these estimates, a number of regulatory deferral accounts are in place.
 - **Commodity Cost Reconciliation Account and Midstream Cost Reconciliation Account:** The differences between actual and forecast gas costs are recorded in these deferral accounts to be recovered or refunded in future rates. This exposes TGI to a recovery lag (the balances are anticipated to be fully recovered or refunded within the next fiscal year), but price adjustments in the price forecast are made on a quarterly basis to better reflect prevailing gas commodity prices. This mitigates the impact of recovery lag.

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- **Revenue Stabilization Adjustment Account (RSAM):** The RSAM seeks to stabilize revenues from residential and commercial customers through a deferral account that captures variances in the forecast versus actual customer use throughout the year. The RSAM account is anticipated to be recovered in rates over three years (for comparison, in Ontario, gas distribution companies are exposed to volume risk, which can be significant due to changes in the weather). Variances in usage by large-volume industrial transportation and sales customers, which account for 45% of total throughput, are not covered by this deferral account. However, their usage is more predictable and less likely to be significantly affected by weather.
- TGI also has in place short- and long-term interest rate deferral accounts to absorb interest rate fluctuations.
- Variances between forecast and actual cost of service and revenue are generally approved by the BCUC for recovery in future rates, with the exception of excess OM&A costs and base-capital expenditures, which are subject to an incentive formula.
 - In 2003, the BCUC approved a negotiated settlement of a performance-based rate (PBR) plan covering the 2004 to 2007 period. In 2007, the BCUC approved a TGI application to extend the PBR through 2009.
 - Under the PBR plan, operating and maintenance costs and base-capital expenditures are subject to an incentive formula that reflects increasing costs as a result of customer growth and inflation less a productivity factor equal to 50% of inflation during the first two years of the plan and 66% of inflation during 2006 and 2007.
 - The PBR plan provides for a 50-50 sharing mechanism of earnings above or below the allowed ROE.
 - Allowed ROE is set annually according to a formula based on a forecast of 30-year Canada Bonds plus a 3.90% risk premium when the forecast yield is 5.25%. The risk premium is adjusted annually by 75% of the difference between 5.25% and the forecast yield. Based on this formula, for F2009, the ROE is set at 8.47% (8.62% in 2008), with an equity thickness of 35%. The equity thickness was increased to 35% from 33% in 2006.
- Declining yields on 30-year Canada Bonds have reduced approved ROEs (and could continue to do so), which, when coupled with increased credit spreads on long-term debt offerings, has resulted in a declining spread between approved ROEs and debt costs. The Company recently filed an application with the BCUC seeking changes to the current generic ROE adjustment mechanism and deemed equity thickness; TGI requested that its ROE be set at 11% (and not be adjusted by an automatic mechanism) and its equity thickness increased to 40%.
- Forecast capital expenditures are also approved by the BCUC. For capital projects that are not covered by the annual capital plan or PBR, TGI submits a separate application to the BCUC. If actual capital costs exceed the amount approved, the excess cost may be subject to a prudence review.

Regulatory Ring-Fencing

A summary of the regulatory ring-fencing conditions in the April 30, 2007, BCUC order imposed on TGI approving the Fortis Inc. acquisition of Terasen Inc. is as follows:

- TGI must maintain the equity in the capital structure at least at the deemed equity level approved by the BCUC (35%).
- TGI must obtain approval from the BCUC before paying dividends to its parent if the paying of dividends can be reasonably expected to increase leverage above the approved level.
- The Company will not be allowed to lend to, guarantee or financially support any affiliates of Terasen Inc. or its non-regulated businesses.
- TGI will not be allowed to enter a tax-sharing agreement with any of its affiliates unless the agreement has been approved by the BCUC.
- TGI must maintain the continued independence of directors.

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Earnings and Outlook

Consolidated Earnings

	12 mos. ended Mar. 31 '09	For the year ended December 31			
(CAD millions)	<u>2009</u>	<u>2008</u>	<u>2007</u>	<u>2006</u>	<u>2005</u>
Net revenues	517	513	507	517	505
EBITDA	291	292	293	301	302
EBIT	211	214	215	217	222
Gross interest expense	112	111	108	106	112
Pre-tax income	101	103	108	112	111
Income taxes	22	25	38	44	42
Net income (before extras)	79	78	70	68	70
Net income	92	92	78	68	65
Return on avg. common equity (bef. extras.)	8.8%	8.9%	7.9%	7.8%	8.4%
EBIT margin (net of gas costs)	40.9%	41.7%	42.3%	42.0%	44.1%
Rate Base	n/a	2,510	2,484	2,516	2,406
Approved common equity	35.0%	35.0%	35.0%	35.0%	33.0%
Allowed ROE	8.47%*	8.62%	8.37%	8.80%	9.03%

* 8.47% for 2009

Summary

- TGI has historically demonstrated very stable levels of EBITDA and EBIT, reflective of modest net additions to its customer base, increases in its rate base and a stable approved equity component, all largely offset by declining allowed ROE.
 - Earnings volatility is further reduced due to the customer breakdown, with residential and commercial customers providing the majority of its margin and industrial customers normally under contract.
- Though in recent years housing starts in British Columbia have been strong, growth in multi-family housing continues to have an impact on net additions as natural gas is less prevalent in this type of dwelling. The BCUC's 2006 decision to increase TGI's equity thickness to 35% from 33% had a positive impact on TGI's performance.
- The gas distribution segment (residential and commercial customers) has historically accounted for more than 50% of total throughput volumes and 90% of total revenues. Throughputs for this segment have exhibited stability over the past five years, and volume risk is mitigated as shortfalls/overages in volume revenues are deferred and recovered/refunded through future rates.
- The transportation segment and industrial customers under fixed-price contracts have historically accounted for approximately 50% of total throughput volumes and less than 10% of total revenues. Although transportation and industrial customer segments are exposed to volume risk, it is mitigated by the fact that their usage is less likely to be significantly affected by weather and is therefore more predictable. Further mitigating this risk is the fixed demand charges derived from these segments.
- Interest expense has been relatively stable over the past five years due to fairly consistent levels of total debt.

Outlook

- In the shorter term, earnings will likely be moderately impacted by the loss of incentive earnings upon expiry of the PBR mechanism. Over the medium term, as a mature gas distribution utility, TGI is expected to have relatively stable earnings with some variability due to allowed ROE, population growth, new housing starts and customer conversions. DBRS expects lower customer growth than in the past few years due to a slowing economy and fewer new housing starts. TGI is expected to focus on retaining customers through expanded energy conservation and efficiency programs.
- Over the longer term, earnings will largely depend on the competitiveness of natural gas relative to electricity in British Columbia. While TGI has maintained a competitive advantage in terms of pricing compared with electricity, its competitive position would weaken should gas prices increase significantly for a prolonged period of time, potentially having a negative impact on TGI's financial and credit profile. The competitiveness of natural gas will also be affected by the provincial consumption tax on carbon-based fuels.

Terasen Gas Inc.

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Financial Profile

	12 mos. ended Mar. 31 '09	For year ended Dec. 31			
(CAD millions)	2009	2008	2007	2006	2005
Net income before extraordinary items	79	78	70	68	70
Depreciation & amortization	79	78	79	84	79
Other non-cash adjustments	(7)	(5)	(3)	8	8
Cash Flow From Operations	151	152	146	160	157
Capital expenditures	(125)	(122)	(108)	(109)	(103)
Common dividends	(58)	(100)	(111)	(40)	(60)
Free Cash Flow Before W/C Changes	(32)	(70)	(73)	12	(7)
Working capital changes	25	33	(28)	83	(45)
Net Free Cash Flow	(7)	(37)	(101)	95	(51)
Acquisitions/divestitures	0	14	0	0	(42)
Other adjustment/comprehensive	38	36	11	(7)	(2)
Cash flow before financing	31	13	(90)	88	(95)
Net change in debt financing	(23)	(5)	89	(98)	109
Net change in pref. share financing	0	0	0	0	0
Net change in equity financing	0	0	0	0	0
Net Change in Cash	8	8	(1)	(9)	14
Total adjusted debt (CAD million) (1)	1,569	1,730	1,744	1,655	1,763
Cash flow/total debt (times) (1)	9.6%	8.8%	8.4%	9.7%	8.9%
% debt in the capital structure (1)	63.6%	66.4%	66.5%	64.7%	67.6%
EBIT interest coverage (times)	1.89	1.88	1.95	2.00	1.94
Dividend payout ratio (%)	73.2%	127.7%	158.0%	58.5%	86.3%

(1) Includes operating leases

Summary

- TGI continues to maintain stable cash flow from operations, which historically has been largely adequate to fund both capital expenditure and dividend payments.
- The relatively large dividend payments in F2007 and F2008 were primarily due to the significant reduction in dividend payment in F2006.
 - Dividend payments in F2006 were modest as TGI, through retained earnings, increased its equity thickness from 33% to the new regulatory-approved 35%. Going forward, DBRS expects that dividend payments will be made in such a way as to keep the Company's debt-to-capital in line with that allowed by the regulator.
 - As part of the ring-fencing condition, TGI is prohibited from paying dividends unless it has in place at least as much equity as required by the BCUC for rate-making purposes. As such, free cash flow has varied along with the level of dividend payments in recent years. Free cash flow deficits over the past five years have been manageable and were funded with debt.
- Leverage remains reasonable at approximately 66%, offset by a weak but acceptable cash flow-to-debt ratio, which is typically in the 8% to 10% range. The stability of TGI's credit metrics is a key factor in its current ratings.

Outlook

- Minimal to modest free cash flow deficits are expected over the medium term, attributable to the replacement and refurbishment of existing infrastructure and modest customer growth. Any deficits are expected to be financed with a combination of TGI's \$500 million revolving bank facility (\$218 million available at December 31, 2008) and long-term debt issuance.
 - DBRS expects the capital expenditure to be approximately \$150 million (before customer contributions) annually over the medium term, with maintenance capital expenditure expected to account for approximately 70% to 80% of the total.
- TGI's financial profile should remain relatively stable over the medium term as the Company is expected to manage its dividends to maintain its capital structure within the regulatory-approved 65% to 35% debt-to-equity (unchanged from 2008).
- Longer term, under reasonable gas and electricity price assumptions, it is expected that TGI will remain competitive relative to alternative energy sources.

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Long-Term Debt Maturities and Liquidity

As at Dec. 31, 2008

(CAD millions)	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>Thereafter</u>	<u>Total</u>
Long-Term Debt	62	2	2	2	2	1,345	1,413

- Currently, TGI has a five-year, \$500 million unsecured committed revolving credit facility with a syndicate of banks that matures in August 2013. Approximately \$389 million was unutilized at March 31, 2009. The credit facility is used to support TGI's \$500 million commercial paper (CP) program and working capital requirements, which vary to a large extent with seasonal gas inventory levels. Gas inventory levels and working capital requirements (and, therefore, short-term debt) typically peak in the fall and winter seasons, with reductions in the spring and summer.
- The debt-repayment schedule is very modest through to 2015. In February 2009, TGI issued \$100 million of 30-year notes, which more than pre-funds the 2009 maturities.
- TGI's bond indenture contains an EBIT-to-interest coverage test in order to issue additional indebtedness. EBIT for 12 consecutive months out of the previous 23 months must be at least 2.0 times its annual pro forma interest requirements for debt that has a maturity term longer than 18 months.
 - The covenant does not apply to debt issuance for refinancing, and interest expenses do not include interest expenses related to short-term debt or Purchase Money Mortgages.

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Balance Sheet (CAD millions)

Assets	2009	2008	2007
Cash	17	13	6
Accounts receivable	388	346	310
Inventories	64	192	187
Prepaid expenses	27	3	4
Rate stabilization accts	116	54	61
Current Assets	613	608	568
Net fixed assets	2,369	2,432	2,380
Rate stabilization accts	0	0	12
Deferred charges	305	0	40
Long-term rec. + investments	101	69	23
Total	3,387	3,109	3,022

Terasen Gas Inc.

Mar. 31 As at December 31			Mar. 31 As at December 31		
2009	2008	2007	2009	2008	2007
Liabilities & Equity			Liabilities & Equity		
Short-term debt	68	239	305		
L.t.d. due in one year	62	62	190		
A/P	371	366	331		
Tax payables	62	66	39		
Rate stabilization acct.	55	24	0		
Current Liabilities	617	755	865		
Long-term debt	1,439	1,340	1,151		
Deferred credits	183	138	78		
Deferred taxes	249	1	51		
Shareholders' equity	900	875	878		
Total	3,387	3,109	3,022		

Ratio Analysis

Liquidity Ratios

	12 mos. ending Mar. 31/09	For the year ended December 31	2009	2008	2007	2006	2005
Current ratio	0.99	0.80	0.66	0.65	0.74		
Accumulated depreciation/gross fixed assets	n/a	23.8%	23.4%	23.5%	21.9%		
Cash flow/total debt (1)	9.6%	8.8%	8.4%	9.7%	8.9%		
Cash flow/capital expenditure	1.21	1.24	1.35	1.47	1.52		
Cash flow-dividends/capital expenditures	0.75	0.43	0.33	1.11	0.94		
% debt in capital structure (1)	63.6%	66.4%	66.5%	64.7%	67.6%		
Approved common equity	35%	35%	35%	35%	33%		
Common dividend payout (before extras.)	73.2%	127.7%	158.0%	58.5%	86.3%		

Coverage Ratios

EBIT interest coverage (1)	1.89	1.88	1.95	2.00	1.94
EBITDA interest coverage (1)	2.61	2.55	2.64	2.84	2.70
Fixed-charges coverage (1)	1.89	1.84	1.90	1.95	1.90
Debt/EBITDA	5.40	5.93	5.95	5.50	5.85

Earnings Quality

EBIT margin, excluding cost of natural gas	40.9%	41.7%	42.3%	42.0%	44.1%
Net margin (excluding preferred dividends)	15.2%	15.3%	13.8%	13.2%	13.8%
Return on avg. common equity (bef. extras.)	8.85%	8.93%	7.89%	7.8%	8.4%
Allowed ROE	8.47% *	8.62%	8.37%	8.80%	9.03%

Operating Statistics

Customers/employees	n/a	758	750	679	671
Customer growth	n/a	1.1%	1.2%	1.3%	1.6%
Operating costs/avg. customer (CAD)	n/a	306	303	318	304
Rate base (CAD millions)	n/a	2,510	2,484	2,516	2,406
Rate base growth	n/a	1.0%	-1.3%	4.6%	4.2%

(1) Includes operating leases

* 8.47% for 2009

Operating Statistics

Throughput Volumes

	2008	2007	2006	2005	2004
Residential	78.5	74.9	68.7	69.4	66.5
Commercial	44.1	42.3	38.4	39.1	38.3
Small industrial	3.1	3.4	3.8	4.2	4.9
Large industrial	0.1	0.2	0.2	0.3	0.4
Total Natural Gas Sales Volumes	125.8	120.8	111.1	113.0	110.1
Transportation service	57.3	62.3	62.3	63.9	0.0
Throughput under fixed-price contracts	39.6	36.8	36.8	36.4	0.0
Total Throughputs (PJs)	222.7	219.9	210.2	213.3	110.1
Customers					
Residential	750,838	742,882	733,598	723,898	712,304
Commercial	81,012	79,717	79,113	78,497	77,624
Small industrial	284	297	325	396	416
Large industrial	33	40	40	45	45
Transportation	2,059	2,041	1,956	1,907	1,741
Total (thousands)	834,226	824,977	815,032	804,743	792,130

Terasen Gas Inc.

Report Date:
May 27, 2009

Ratings

Debt Rated	Rating	Rating Action	Trend
Commercial Paper	R-1 (low)	Confirmed	Stable
Purchase Money Mortgages	A	Confirmed	table
MTNs & Unsecured Debentures	A	Confirmed	Stable

Rating History

Debt Rated	Current	2008	2007	2006	2005	2004
Commercial Paper	R-1 (low)	R-1 (low)	R-1 (low)	R-1 (low)	R-1 (low)	R-1 (low)
Purchase Money Mortgages	A	A	A	A	A	A
MTNs & Unsecured Debentures	A	A	A	A	A	A

Note:

All figures are in Canadian dollars unless otherwise noted.

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Rating Report

Report Date:

July 22, 2010

Previous Report

May 27, 2009



Insight beyond the rating.

Terasen Gas Inc.

Analysts

Adeola Adebayo

+1 416 597 7421

aadebayo@dbrs.com

Michael Caranci

+1 416 597 7304

mcaranci@dbrs.com

The Company

Terasen Gas Inc. (TGI or the Company) is the largest natural gas distributor in British Columbia, serving approximately 840,000 customers, representing 90% of the province's natural gas users. The Company is 100% owned by Terasen Inc. (rated BBB (high)), which is a wholly owned subsidiary of Fortis Inc. (rated BBB (high)). The ratings assigned to TGI are based predominantly on a stand-alone basis.

Rating

Debt	Rating	Rating Action	Trend
Commercial Paper	R-1 (low)	Confirmed	Stable
Purchase Money Mortgages	A	Confirmed	Stable
MTNs & Unsecured Debentures	A	Confirmed	Stable

Rating Update

DBRS has confirmed the Purchase Money Mortgages and the MTNs & Unsecured Debentures ratings of Terasen Gas Inc. (TGI or the Company) at "A" and its Commercial Paper rating at R-1 (low), all with Stable trends. The rating confirmations reflect TGI's low business risk natural gas distribution operations; a favourable regulatory environment, with strong ring-fencing provisions; a strong franchise area, with a large customer base; and a modestly improved financial profile.

In late 2009, TGI executed a negotiated settlement that established rates for 2010 and 2011. The settlement excluded the performance-based rate (PBR) mechanism, under which the Company had operated for the 2004 to 2009 period. The PBR had allowed TGI the opportunity to share earnings above the allowed return on equity (ROE) with customers on a 50/50 basis and had been beneficial to TGI as it had provided more than \$11 million per year in earnings, on average, in 2008 and 2009. While the loss of this PBR income would have negatively affected TGI's financial results, this was largely offset by an improvement in regulatory allowed ROE (to 9.50% from the 8.43% that would otherwise have been in effect) and equity thickness (from 35.01% to 40%). The regulatory environment also continues to provide for a number of cost-recovery mechanisms that, when combined with the general rate-setting methodology, allow for a full recovery of all prudently incurred operating expenses and capital expenditures within a reasonable time frame.

The Company's credit metrics have historically remained consistent and are expected to continue to do so, with a modest lift from the recent regulatory changes. With the increases in approved ROE and equity thickness, partially offset by the loss of PBR, DBRS estimates an increase in the EBIT coverage metric of approximately 0.25 times and an increase of approximately 150 basis points in cash flow-to-debt over recent historicals. However, TGI's coverage metrics are expected to remain moderately lower than those of similarly rated gas distribution companies, even factoring in the improvements, a differential DBRS views as being offset by the Company's more stable credit metrics and business risk profile. (Continued on page 2.)

Rating Considerations

Strengths

- (1) Low business risk and supportive regulatory framework
- (2) Strong regulatory ring-fencing provisions
- (3) Reasonable balance sheet and stable credit metrics
- (4) Strong franchise area, with a large customer base

Challenges

- (1) Long-term competitiveness of natural gas relative to alternative energy sources
- (2) Volume exposure in the industrial and transportation segment
- (3) ROE levels and loss of PBR incentive earnings

Financial Information

	For the 12-mos. ended Mar. 31/10	2009	2008	2007	2006	2005
EBIT interest coverage (1)	2.1	1.9	1.9	1.9	2.0	1.9
% debt in capital structure (1)	59.9%	66.4%	66.4%	66.5%	64.7%	67.6%
Cash flow/total debt (times) (1)	11.7%	9.8%	8.8%	8.4%	9.7%	8.9%
Cash flow/capital expenditures (times)	1.3	1.2	1.2	1.3	1.5	1.5
Net income bef. extras (CAD millions)	102	87	78	70	68	70
Operating cash flow (CAD millions)	184	170	152	146	160	157

(1) Includes operating leases

Terasen Gas Inc.

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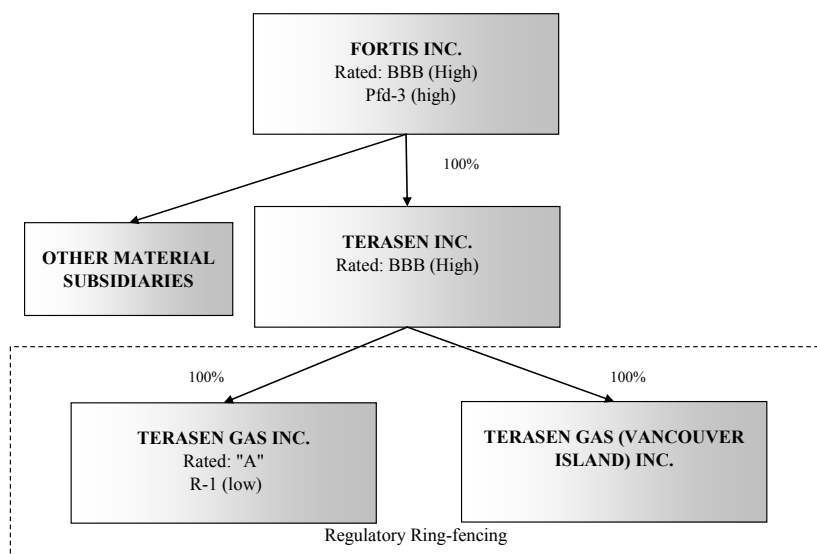
Rating Update (Continued from page 1.)

Minimal to modest free cash flow deficits are expected over the medium term, attributable to the replacement and refurbishment of existing infrastructure (which is expected to go into the rate base in a timely manner) and modest customer growth. Any deficits would be expected to be financed with a combination of the \$500 million revolving bank facility (\$414 million available at March 31, 2010) and long-term debt issuance. TGI's balance sheet is expected to remain stable over the medium term as the Company is expected to manage its dividends to maintain its capital structure within the recently revised regulatory-approved debt-to-equity ratio of 60%-to-40%.

DBRS expects the lower customer growth trend to continue, with fewer new housing starts and a shift in the housing mix to more multi-family dwellings. TGI is expected to focus on retaining customers through expanded energy conservation and efficiency programs.

The Company continues to maintain a price advantage relative to electricity, the primary competitor to natural gas. The current weaker gas pricing environment both improves TGI's competitiveness and reduces working capital and liquidity requirements. TGI's financial strength and credit profile over the longer term will depend to some extent on the continued competitiveness of natural gas relative to alternative energy sources (mainly electricity).

Simplified TGI Ownership and Rating Chart



Rating Considerations Details

Strengths

(1) TGI benefits from having all its operations in a low-risk, stable regulated environment within a supportive regulatory framework. TGI operates under a full cost-of-service recovery regime, with deferral accounts existing to stabilize earnings and to adjust for the recovery/refund of shortfalls/overages of natural gas costs from/to customers. TGI has no exposure to commodity costs (subject to a recovery lag) as natural gas costs are fully passed on to customers, with quarterly adjustments.

(2) Regulatory ring-fencing conditions imposed on TGI in the 2007 British Columbia Utilities Commission (BCUC) order approving acquisition of Terasen Inc. by Fortis Inc. are viewed as positive for TGI's credit profile, offering protection from significant changes in its capital structure.

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(3) TGI has historically maintained a stable balance sheet and credit metrics, with some modest improvement attributable to recent regulatory changes. While the EBIT coverage and cash flow-to-debt ratios have improved and are expected to remain at more modestly favourable levels, they remain on the lower end for an “A” rating compared with its gas distribution peers. However, DBRS remains comfortable with TGI’s rating given the inherent stability its credit metrics have shown over time.

(4) TGI serves a large customer base of approximately 840,000, located in a stable franchise area that includes the city of Vancouver. The customer mix is favourable, with residential and commercial customers accounting for 90% of distribution revenues. There is no volume risk (but recovery lag exists) associated with this customer segment.

Challenges

(1) TGI’s earnings and financial profile over the longer term will largely depend on the competitive position of natural gas relative to alternative energy sources (mainly electricity) in British Columbia. Despite the significant increases in natural gas prices through 2008, natural gas continued to maintain a competitive advantage over electricity in terms of pricing. While gas prices have since retreated, it is expected that under reasonable gas price assumptions, TGI will remain competitive relative to electricity, with electricity prices expected to rise gradually in the medium term, according to British Columbia Hydro & Power Authority (BC Hydro).

(2) The Company is exposed to variances from forecasts when it comes to its industrial fixed-price contracts and transportation-services segments, which represent approximately 45% of throughput volumes (5% of revenues). However, this exposure is mitigated by the fact that their usage is less likely to be significantly affected by weather and is therefore more predictable. TGI conducts an annual survey of its industrial customer segment to minimize forecast variances in throughput volumes. Further mitigating this risk is the fixed demand charges derived from this segment.

(3) Although the BCUC terminated the automatic ROE adjustment formula and set the approved level at 9.50% (effective July 1, 2009), it had been below 9% for the prior three years, negatively affecting earnings and cash flows. With use of the adjustment formula having been terminated, there is uncertainty as to how ROE levels will be determined in the medium and longer term; the BCUC has directed TGI to investigate alternative mechanisms. Additionally, under the prior PBR, TGI shared earnings above or below the allowed ROE on a 50/50 basis with customers. The loss of this is expected to largely offset the credit metric upside of the ROE increase as TGI’s incentive earnings averaged more than \$11 million per year in 2008 and 2009.

Regulation

Regulatory Overview

TGI is regulated by the BCUC on a test-year forecast basis under a rate-of-return/cost-of-service regime. TGI applies to the BCUC for approval of rates to recover its forecast cost-of-service. TGI’s cost of service includes the cost of purchased gas and the cost of gas transportation and distribution through the pipeline system, including operating, maintenance and administrative expenses (OM&A); depreciation of facilities; interest; income and other taxes; and ROE.

TGI purchases gas for resale, without markup, to residential and commercial customers; transportation customers and some large commercial and industrial customers arrange for their own gas supply and contract with TGI for the transportation of that gas. TGI’s rates are based on estimates of several items, such as natural gas sales volumes, cost of natural gas and interest rates. In order to manage the risks associated with some of these estimates, a number of regulatory deferral accounts are in place.

- **Commodity Cost Reconciliation Account and Midstream Cost Reconciliation Account:** The differences between actual and forecast gas costs are recorded in these deferral accounts to be recovered or refunded in future rates. This exposes TGI to a recovery lag (the balances are anticipated to be fully recovered or refunded within the next fiscal year), but price adjustments are made on a quarterly basis to better reflect prevailing gas commodity prices. This mitigates the impact of recovery lag.

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- **Revenue Stabilization Adjustment Account (RSAM):** The RSAM seeks to stabilize revenues from residential and commercial customers through a deferral account that captures variances in the forecast versus actual customer use throughout the year. The RSAM account is anticipated to be recovered in rates over three years (for comparison, in Ontario, gas distribution companies are exposed to volume risk, which can be significant due to changes in the weather). Variances in usage by large-volume industrial transportation and sales customers, which account for 45% of total throughput, are not covered by this deferral account. However, their usage is more predictable and less likely to be significantly affected by weather.
- TGI also has short- and long-term interest rate deferral accounts to absorb interest rate fluctuations.

Under the PBR, which was in effect from 2004 to 2009, operating and maintenance costs and base-capital expenditures were subject to an incentive formula that reflected increasing costs as a result of customer growth and inflation less a productivity factor. The PBR provided for a 50/50 sharing mechanism of earnings above or below the allowed ROE. However, in 2009, a negotiated settlement was reached that established TGI's rates for 2010 and 2011; PBR ended in 2009 and is not part of the negotiated settlement, which allows for the incorporation into rates of changes to the BCUC-determined levels of ROE and common equity.

Allowed ROE had been set annually according to a formula based on a forecast of 30-year Canada Bonds plus a 3.90% risk premium when the forecast yield is 5.25%. The risk premium was adjusted annually by 75% of the difference between 5.25% and the forecast yield. The common equity component of the capital structure was set at 35.01%. However, in 2009, TGI filed a BCUC application requesting an increase in the common equity component and a higher return on equity. In its decision, the BCUC determined that the ROE adjustment mechanism would no longer apply and that an ROE of 9.50% would be in effect from July 1, 2009, until amended; the BCUC directed TGI to complete a study of alternative mechanisms and report back by the end of 2010.

TGI's common equity component was also increased from 35.01% to 40%, effective January 1, 2010; TGI received a \$125 million equity injection early in January 2010 to bring its capital structure into alignment with this revision. Forecast capital expenditures are also approved by the BCUC.

Regulatory Ring-Fencing

A summary of the regulatory ring-fencing conditions in the April 30, 2007, BCUC order imposed on TGI approving the Fortis Inc. acquisition of Terasen Inc. is as follows:

- TGI must maintain the equity in the capital structure at least at the deemed equity level approved by the BCUC (now 40%).
- TGI must obtain approval from the BCUC before paying dividends to its parent if the paying of dividends can be reasonably expected to increase leverage above the approved level.
- The Company will not be allowed to lend to, guarantee or financially support any affiliates of Terasen Inc. or its non-regulated businesses.
- TGI will not be allowed to enter a tax-sharing agreement with any of its affiliates unless the agreement has been approved by the BCUC.
- TGI must maintain the continued independence of directors.

Terasen Gas Inc.

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Earnings and Outlook

Consolidated Earnings

	For the 12-mos. ended Mar. 31/10	For the year ended December 31				
(CAD millions)		2009	2008	2007	2006	2005
Net revenues	550	526	513	507	517	505
EBITDA	319	297	292	293	301	302
EBIT	233	214	214	215	217	222
Gross interest expense	107	109	111	108	106	112
Pre-tax income	126	106	103	108	112	111
Income taxes	25	19	25	38	44	42
Net income (before extras)	102	87	78	70	68	70
Net income	102	87	92	78	68	65
Return on avg. common equity (bef. extras.)	10.4%	9.9%	8.9%	7.9%	7.8%	8.4%
EBIT margin (net of gas costs)	42.3%	40.7%	41.7%	42.3%	42.0%	44.1%
Rate Base*	2,542	2,547	2,510	2,484	2,516	2,406
Approved common equity	40.00%	35.01%	35.01%	35.01%	35.01%	33.00%
Allowed ROE**	9.50%	8.47%	8.62%	8.37%	8.80%	9.03%

* \$2,542 million for 2010. ** 8.47% for first six months of 2009, 9.50% for second six months

Summary

TGI has historically demonstrated very stable levels of EBITDA and EBIT, reflective of modest net additions to its customer base, increases in its rate base and a stable approved equity component, all largely offset by declining allowed ROE levels. Earnings volatility is further reduced due to the customer breakdown, with residential and commercial customers providing the majority of its margin and industrial customers normally under contract. Much of the recent modest improvement in earnings is attributable to the recent BCUC decision to increase both the common equity component and the approved ROE. Growth in multi-family housing continues to have an impact on net additions as natural gas is less prevalent in this type of dwelling.

The gas distribution segment (residential and commercial customers) has historically accounted for more than 50% of total throughput volumes and 90% of total revenues. Throughputs for this segment exhibit stability, and any volume risk is mitigated as shortfalls/overages in volume revenues are deferred and recovered/refunded through future rates.

The transportation segment and industrial customers under fixed-price contracts have historically accounted for approximately 50% of total throughput volumes and less than 10% of total revenues. Although transportation and industrial customer segments are exposed to volume risk, it is mitigated by the fact that their usage is less likely to be significantly affected by weather and is therefore more predictable. Further mitigating this risk is the fixed demand charges derived from these segments. Interest expense has been relatively stable over the past five years due to fairly consistent levels of total debt.

Outlook

DBRS expects earnings to continue at their modestly higher levels due to the impact of the higher equity component and approved ROE, modestly offset by the negative impact of the loss of incentive earnings upon expiry of the PBR mechanism. Over the medium term, as a mature gas distribution utility, TGI is expected to have relatively stable earnings, with some variability due to allowed ROE, population growth, new housing starts and customer conversions.

Over the longer term, earnings will largely depend on the competitiveness of natural gas relative to electricity in British Columbia. While TGI has maintained a competitive advantage in terms of pricing compared with electricity, its competitive position would weaken should gas prices increase significantly for a prolonged period of time, potentially having a negative impact on TGI's financial and credit profile. The competitiveness of natural gas will also be affected by the provincial consumption tax on carbon-based fuels.

Terasen Gas Inc.

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Financial Profile

	For the 12-mos. ended Mar. 31/10	2009	2008	2007	2006	2005
(CAD millions)						
Net income before extraordinary items	102	87	78	70	68	70
Depreciation & amortization	86	83	78	79	84	79
Other non-cash adjustments	(4)	0	(5)	(3)	8	8
Cash Flow From Operations	184	170	152	146	160	157
Capital expenditures	(140)	(139)	(122)	(108)	(109)	(103)
Common dividends	(75)	(67)	(100)	(111)	(40)	(60)
Free Cash Flow Before W/C Changes	(30)	(36)	(70)	(73)	12	(7)
Working capital changes	(10)	16	33	(28)	83	(45)
Net Free Cash Flow	(40)	(20)	(37)	(101)	95	(51)
Acquisitions/divestitures	0	0	14	0	0	(42)
Other adjustment/comprehensive	(13)	7	36	11	(7)	(2)
Cash flow before financing	(53)	(13)	13	(90)	88	(95)
Net change in debt financing	(86)	6	(5)	89	(98)	109
Net change in pref. share financing	0	0	0	0	0	0
Net change in equity financing	125	0	0	0	0	0
Net Change in Cash	(13)	(7)	8	(1)	(9)	14
Total adjusted debt (CAD million) (1)	1,573	1,737	1,730	1,744	1,655	1,763
Cash flow/total debt (times) (1)	11.7%	9.8%	8.8%	8.4%	9.7%	8.9%
% debt in the capital structure (1)	60%	66%	66%	67%	65%	68%
EBIT interest coverage (times)	2.1	1.9	1.9	1.9	2.0	1.9
Dividend payout ratio (%)	74%	77%	128%	158%	58%	86%

(1) Includes operating leases

Summary

TGI has maintained stable cash flow from operations, which historically has been largely adequate to fund both capital expenditure and dividend payments. The recent uptick is attributable to the recent regulatory changes to ROE and equity thickness. The level of dividends is expected to continue to maintain TGI's capital structure in line with BCUC-approved levels. TGI has received a \$125 million equity injection to bring its capital structure in line with the BCUC's decision to increase the common equity component to 40%. Proceeds were largely used to reduce debt.

As part of the ring-fencing condition, TGI is prohibited from paying dividends unless it has in place at least as much equity as required by the BCUC for rate-making purposes (now 40%). Leverage has thus improved to 60%, with a commensurate modest improvement in coverage metrics expected. The stability of TGI's coverage metrics continues to be a key factor in its ratings.

Outlook

Minimal to modest free cash flow deficits are expected over the medium term, attributable to the replacement and refurbishment of existing infrastructure and modest customer growth. Any deficits are expected to be financed with a combination of TGI's \$500 million revolving bank facility (\$414 million available at March 31, 2010) and long-term debt issuance. DBRS expects the capital expenditure to be approximately \$150 million (before customer contributions) annually over the medium term, with maintenance capital expenditure expected to account for approximately 70% to 80% of the total.

TGI's financial profile should remain relatively stable over the medium term as the Company is expected to manage its dividends to maintain its capital structure within the recently approved 60%-to-40% debt-to-equity ratio. With the recent regulatory changes, DBRS estimates the following improvements: cash flow-to-total debt to move from its historic 8% to 10% range to approximately 10% to 12% and EBIT-to-interest to remain greater than 2.0 times. Longer term, under reasonable gas and electricity price assumptions, it is expected that TGI will remain competitive relative to alternative energy sources.

Terasen Gas Inc.
Report Date:

July 22, 2010

Long-Term Debt Maturities and Liquidity
As at Mar. 31, 2010

(CAD millions)	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>Thereafter</u>	<u>Total</u>
Long-Term Debt	2	2	2	2	2	1,447	1,456

TGI has a five-year, \$500 million unsecured committed revolving credit facility with a syndicate of banks that matures in August 2013; \$414 million was unutilized at March 31, 2010. The credit facility is primarily used to support TGI's \$500 million commercial paper (CP) program and working capital requirements, which vary to a large extent with seasonal gas inventory levels. Gas inventory levels and working capital requirements typically peak in the fall and winter seasons, with reductions in the spring and summer. The debt-repayment schedule is negligible in the near term.

TGI's bond indenture contains an EBIT-to-interest coverage test in order to issue additional indebtedness. EBIT for 12 consecutive months out of the previous 23 months must be at least 2.0 times its annual pro forma interest requirements for debt that has a maturity term longer than 18 months.

Terasen Gas Inc.

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July 22, 2010

Terasen Gas Inc.

Balance Sheet

(CAD millions)

Assets	Mar. 31/10	2009	2008
Cash	4	6	13
Accounts receivable	268	277	346
Inventories	108	149	192
Prepaid expenses	2	23	3
Rate stabilization accts	146	69	54
Current Assets	528	524	608
Net fixed assets	2,429	2,489	2,432
Rate stabilization accts	0	0	0
Deferred charges	0	0	0
Long-term rec. + investments	420	355	69
Total	3,377	3,368	3,109

As at December 31			As at December 31		
Mar. 31/10	2009	2008	Mar. 31/10	2009	2008
Liabilities & Equity			Liabilities & Equity		
Short-term debt	40	204	239		
L.t.d. due in one year	2	2	62		
A/P	360	337	366		
Tax payables	41	42	66		
Rate stabilization acct.	2	12	24		
Current Liabilities	446	597	755		
Long-term debt	1,441	1,440	1,340		
Deferred credits	163	173	138		
Deferred taxes	275	276	1		
Shareholders' equity	1,051	881	875		
Total	3,377	3,368	3,109		

Ratio Analysis

Liquidity Ratios

	For the 12-mos. ended Mar. 31/10	2009	2008	2007	2006	2005
Current ratio	1.18	0.88	0.80	0.66	0.65	0.74
Accumulated depreciation/gross fixed assets	na	24.1%	23.8%	23.4%	23.5%	21.9%
Cash flow/total debt (1)	11.7%	9.8%	8.8%	8.4%	9.7%	8.9%
Cash flow/capital expenditure	1.32	1.22	1.24	1.35	1.47	1.52
Cash flow-dividends/capital expenditures	0.78	0.74	0.43	0.33	1.11	0.94
% debt in capital structure (1)	59.9%	66.4%	66.4%	66.5%	64.7%	67.6%
Approved common equity	40.00%	35.01%	35.01%	35.01%	35.01%	33.00%
Common dividend payout (before extras.)	73.8%	77.4%	127.7%	158.0%	58.5%	86.3%

Coverage Ratios

EBIT interest coverage (1)	2.1	1.9	1.9	1.9	2.0	1.9
EBITDA interest coverage (1)	2.9	2.6	2.6	2.6	2.8	2.7
Fixed-charges coverage (1)	2.1	1.9	1.8	1.9	2.0	1.9
Debt/EBITDA	4.9	5.9	5.9	6.0	5.5	5.8

Earnings Quality

EBIT margin, excluding cost of natural gas	42.3%	40.7%	41.7%	42.3%	42.0%	44.1%
Net margin (excluding preferred dividends)	18.5%	16.5%	15.3%	13.8%	13.2%	13.8%
Return on avg. common equity (bef. extras.)	10.41%	9.87%	8.93%	7.89%	7.8%	8.4%
Allowed ROE *	9.50%	8.47%	8.62%	8.37%	8.80%	9.03%

Operating Statistics

Customer growth	n/a	0.6%	1.1%	1.2%	1.3%	1.6%
Operating costs/avg. customer (CAD)	321	316	306	303	318	304
Rate base (CAD millions)	2,542	2,547	2,510	2,484	2,516	2,406
Rate base growth	-0.2%	1.5%	1.0%	-1.3%	4.6%	4.2%

(1) Includes operating leases

* 8.47% for first six months of 2009, 9.50% for second six months

Operating Statistics

Throughput Volumes

	2009	2008	2007	2006	2005
Residential	72.7	78.5	74.9	68.7	69.4
Commercial	42.4	44.1	42.3	38.4	39.1
Small industrial	3.0	3.1	3.4	3.8	4.2
Large industrial	0.2	0.1	0.2	0.2	0.3

Total Natural Gas Sales Volumes

Transportation service	54.0	57.3	62.3	62.3	63.9
Throughput under fixed-price contracts	36.0	39.6	36.8	36.8	36.4
Total Throughputs (PJs)	208.3	222.7	219.9	210.2	213.3

Customers

Residential	755,660	750,838	742,882	733,598	723,898
Commercial	81,274	81,012	79,717	79,113	78,497
Small industrial	251	284	297	325	396
Large industrial	31	33	40	40	45
Transportation	2,078	2,059	2,041	1,956	1,907
Total (thousands)	839,294	834,226	824,977	815,032	804,743

Terasen Gas Inc.

Report Date:
July 22, 2010

Ratings

Debt Rated	Rating	Rating Action	Trend
Commercial Paper	R-1 (low)	Confirmed	Stable
Purchase Money Mortgages	A	Confirmed	Stable
MTNs & Unsecured Debentures	A	Confirmed	Stable

Rating History

Debt Rated	Current	2009	2008	2007	2006	2005
Commercial Paper	R-1 (low)	R-1 (low)	R-1 (low)	R-1 (low)	R-1 (low)	R-1 (low)
Purchase Money Mortgages	A	A	A	A	A	A
MTNs & Unsecured Debentures	A	A	A	A	A	A

Related Research

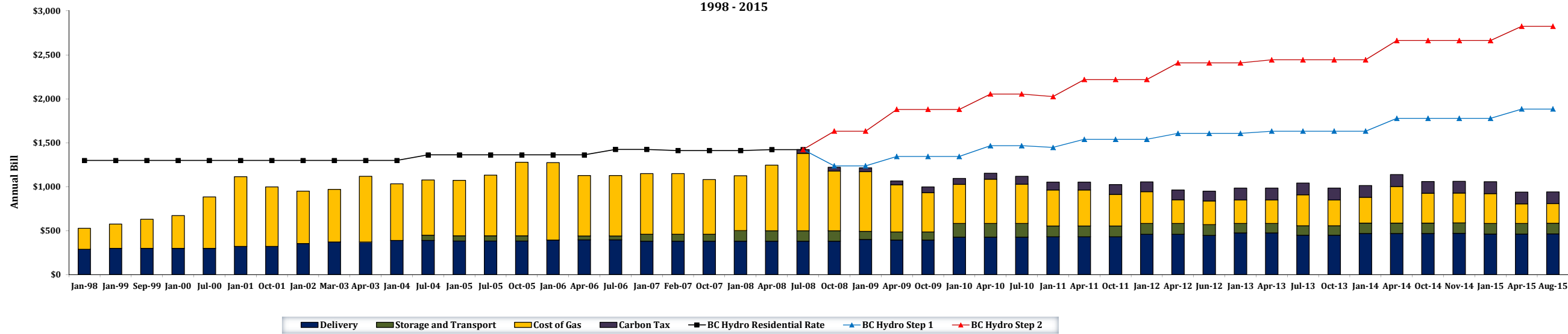
- [Recent Regulatory Developments for Canadian Pipeline and Utility Companies](#), February 10, 2010.

Note:

All figures are in Canadian dollars unless otherwise noted.

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FEI Residential (Rate Schedule 1) Annual Natural Gas and Electric Energy Costs in the Lower Mainland
1998 - 2015



Assumptions:
*FEI Lower Mainland Service Area become the Mainland Service Area effective January 1, 2015
*Natural gas use of 90 GJ
*Efficiency of gas equipment is 90% relative to 100% for electricity
*FortisBC Energy amount includes the basic charge

A SURVEY OF CANADIAN AND GLOBAL CAPITAL MARKETS AND INDUSTRY TRENDS

JANUARY 2015



2015
FEARLESS
FORECAST



CONTENTS

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A high-angle photograph of a person jumping from a rocky cliff into the ocean. The person is shirtless, wearing patterned swim trunks, and has their arms outstretched. The water is a deep blue, and white foam is visible where the person is entering. The cliff is made of reddish-brown rock. The bottom half of the image is a solid teal color with a large white number '1' on the left side.

1

IN REVIEW: LAST YEAR'S FEARLESS FORECAST VERSUS ACTUAL RESULTS

	Median forecast for 2014	Actual 2014 results
The economy		
Canadian Exchange Rate (US\$/C\$)	US\$ 0.93	US\$ 0.86
Annual Inflation Rate (CPI)	1.7%	2.2% ¹
Real Canadian GDP Growth Rate	2.0%	2.3%
Real Global GDP Growth Rate	3.5%	3.3%
WTI Crude Oil Price (US\$/barrel)	\$95	\$53
Investment benchmark returns		
S&P/TSX Composite	8.0%	10.6%
S&P 500 (C\$)	8.0%	23.9%
MSCI EAFE (C\$)	9.1%	4.1%
MSCI ACWI (C\$)	9.0%	14.1%
FTSE TMX Canada Universe Bond	1.5%	8.8%
FTSE TMX Canada Long Bond	0.5%	17.5%
FTSE TMX Canada Real Return Bond	0.5%	13.2%
Top performing Canadian sectors		
Financials	1st	8th
Energy	2nd	10th

¹ YTD November 30, 2014

2

HIGHLIGHTS

Mercer is pleased to present the results of the Fearless Forecast for 2015. Conducted in late fourth quarter of 2014, these results represent the views of 46 Canadian and Global Investment Managers on the economy and capital markets.

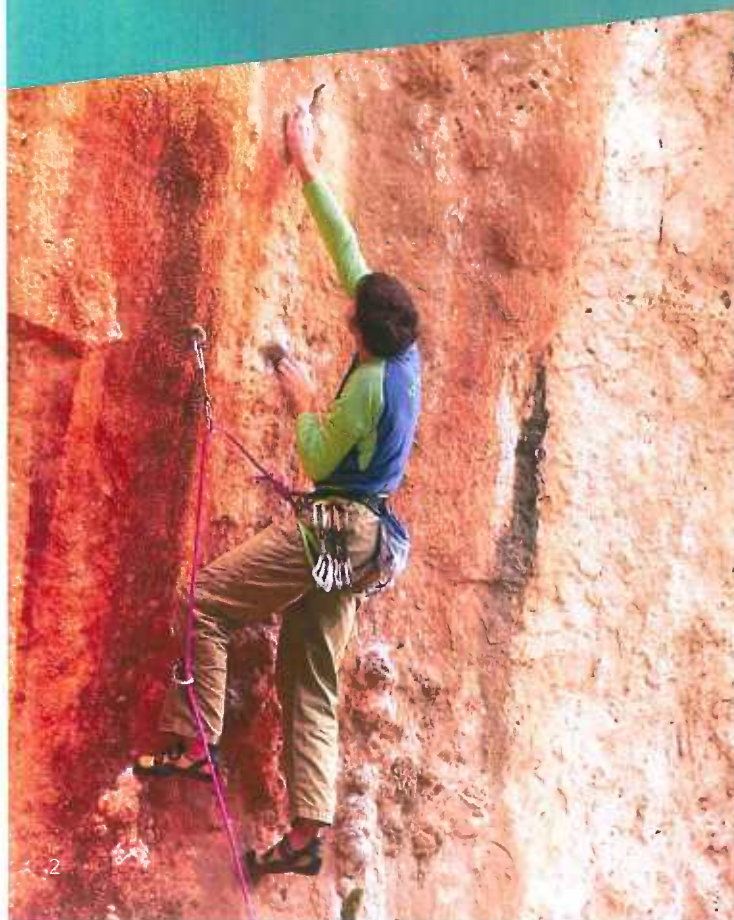
ECONOMIC INDICATORS

Looking back, 2014 was a year marked by slower growth for many global economies. This, combined with falling inflation, prompted several central banks to ease policy further, including the European Central Bank, the Bank of Japan and the People's Bank of China. In contrast, the US economy moved into a long-awaited higher gear, driven by stronger consumer spending and a rapidly improving labor market. The Canadian economy was also relatively healthy for much of 2014, underpinned by increased exports and higher business investment. However, that may change going forward, given one of the biggest stories of 2014—the sharp drop of nearly 50% in oil prices. On the surface, lower oil prices should be a net positive for the global economy in 2015 and beyond, since consumers will have more spending money, but produce big winners (China, Japan, India) and losers (Middle East, Latin America, Russia). Russia's turmoil was the other big story of 2014 and the risk of spillover to other markets, combined with the upcoming Greek elections, may be a concern for 2015. In the US, the positive impact on consumers' pocketbooks should outweigh any negatives from falling energy investment and production. By extension, this should have a modest net benefit to the Canadian economy, although overall, the direct impact of an oil price drop on Canadian GDP growth is expected to be negative.

Global GDP growth is expected to be higher than Canadian GDP growth. Managers forecast that global economic growth will be 3.2% for 2015, below the IMF's 2015 forecast of 3.8%¹. For the Canadian economy, managers' growth forecasts, at 2.3%, are almost on par with IMF estimates of 2.4%¹.

Canadian inflation was 2.2% for the year-to-date ending November 2014 and the median manager forecast anticipates that inflation will be slightly lower at the end of 2015 at 1.9%.

¹ IMF, World Economic Outlook October 2014



Gold was fairly flat in 2014, ending at US\$ 1,184 per troy ounce and managers anticipate the median price at the end of 2015 to be US\$ 1,200 per troy ounce.

Most managers anticipate oil prices will rebound in 2015; the median forecast anticipates oil will be US\$ 80 per barrel, compared to the 2014 year-end price of US\$ 53 per barrel.

Most managers expect the Canadian dollar to remain stable against the US dollar; the median forecast anticipates an exchange rate of C\$ 0.87/US\$ by the end of 2015.

CAPITAL MARKETS

Managers expect public equity markets to post median returns (in C\$) between 7.5% and 8.0% in 2015. Four year expectations for equities are also strong with a median four year forecast (in C\$) of 7.0% for the S&P/TSX Composite Index, 7.2% for the MSCI ACWI Index and 7.3% for the S&P500 Index.

Emerging markets and International equities are expected to outperform Canadian and US equities for 2015. Small cap and large cap stocks are expected to have similar returns in both Canada and the US for 2015.

Managers are more tempered in their fixed income return forecasts. Fixed income returns are expected to be very low with a median one year forecast of 1.5% for the FTSE TMX Canada Universe Index and 0.9% for the FTSE TMX Canada Long Bond Index. Four year expectations for fixed income are slightly better with a median four year forecast of 2.4% for the FTSE TMX Canada Universe Index and 2.0% for the FTSE TMX Canada Long Bond Index.

Alternative assets are expected to do well with one and four year median returns forecasted to post returns in the range of 5.0% to 7.4%. Private equity returns are generally expected to be stronger than infrastructure, hedge funds and real estate returns over the next one and four year periods.

ASSET ALLOCATION

For duration-matched fixed income strategies, managers' views have changed this year where 14% of managers expect a reduction in matching assets (vs 27% last year) and 52% expect an increase (vs 46% last year).

For alternative asset classes, nearly two thirds of managers believe that exposure to infrastructure will increase this year, and a third believe that exposure to private equity will increase. Opinion on hedge funds is equally divided, between managers expecting exposure to increase and those expecting it to decrease. Two thirds of managers expect exposure to real estate not to move in 2015.

For the public equity markets, most notable is the fact that two thirds of managers expect Canadian equity exposure to decrease, and half to two thirds expect exposure to low volatility, global developed and emerging equities to increase.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE CONSIDERATIONS ("ESG")

Integration of ESG indicators in the investment decision making process is expected by 92% of the managers within the next ten years.



3 THE ECONOMY

REAL CANADIAN GROSS DOMESTIC PRODUCT GROWTH RATE



Estimated Canadian GDP growth rate for 2014

2.3%

Forecasted at December 31, 2015



Prediction average

2.2%

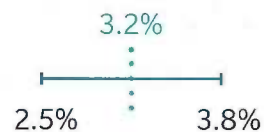
GLOBAL GROSS DOMESTIC PRODUCT GROWTH RATE



Estimated World GDP growth rate for 2014

3.3%

Forecasted at December 31, 2015



Prediction average

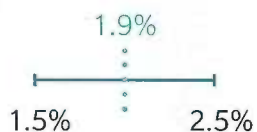
3.2%

Important note: All line charts in this document represent the 5th percentile, median and 95th percentile.

CANADIAN INFLATION RATE (CPI)



Forecasted at
December 31, 2015



YTD November
2014

2.2%

Prediction average

1.9%

CANADIAN EXCHANGE RATE



Forecasted at
December 31, 2015



December 31,
2014

0.86

Prediction average

0.87

CRUDE OIL PRICE (US\$ PER BARREL)



Forecasted at
December 31, 2015



December 31,
2014

\$53

Prediction average

\$80

SPOT PRICE OF GOLD (US\$/TROY OUNCE)



Forecasted at
December 31, 2015



December 31,
2014

\$1,184

Prediction average

\$1,173

4

INVESTMENT BENCHMARK RETURNS

I. Fixed income

FTSE TMX CANADA UNIVERSE BOND



One-year return to
December 2014

8.8%

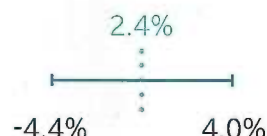
1-yr forecast to
December 31, 2015



Prediction average

0.6%

4-yr forecast to
December 31, 2018



Prediction average

1.5%

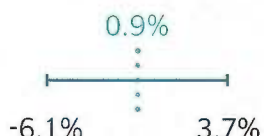
FTSE TMX CANADA LONG BOND



One-year return to
December 2014

17.5%

1-yr forecast to
December 31, 2015



Prediction average

0.1%

4-yr forecast to
December 31, 2018



Prediction average

1.4%

FTSE TMX CANADA REAL RETURN BOND



One-year return to
December 2014

13.2%

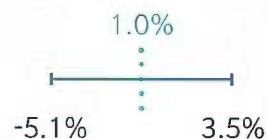
1-yr forecast to
December 31, 2015



Prediction average

0.2%

4-yr forecast to
December 31, 2018



Prediction average

0.8%

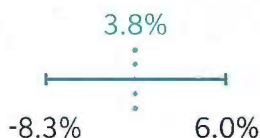
HIGH-YIELD BOND TOTAL RETURN



One-year return to
December 2014

3.3%

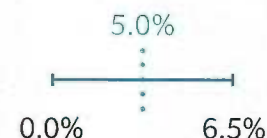
1-yr forecast to
December 31, 2015



Prediction average

2.2%

4-yr forecast to
December 31, 2018



Prediction average

3.9%

Benchmark: Bank of America Merrill Lynch US High Yield Master II Hedged to C\$

GLOBAL BOND TOTAL RETURN



One-year return to
December 2014

9.6%

1-yr forecast to
December 31, 2015



Prediction average

1.6%

4-yr forecast to
December 31, 2018



Prediction average

2.6%

Benchmark: Barclays Capital Global Aggregate C\$

4

INVESTMENT BENCHMARK RETURNS

II. Equities

S&P/TSX COMPOSITE TOTAL RETURN



One-year return to
December 2014

10.6%

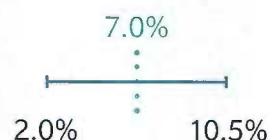
1-yr forecast to
December 31, 2015



Prediction average

6.2%

4-yr forecast to
December 31, 2018



Prediction average

6.8%

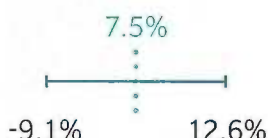
S&P/TSX SMALL CAP TOTAL RETURN



One-year return to
December 2014

-2.3%

1-yr forecast to
December 31, 2015



Prediction average

5.1%

4-yr forecast to
December 31, 2018



Prediction average

7.0%

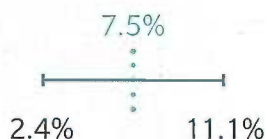
S&P 500 (C\$) TOTAL RETURN



One-year return to
December 2014

23.9%

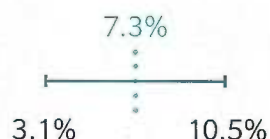
1-yr forecast to
December 31, 2015



Prediction average

6.9%

4-yr forecast to
December 31, 2018



Prediction average

7.4%

RUSSELL 2000 (C\$) TOTAL RETURN



One-year return to
December 2014

14.3%

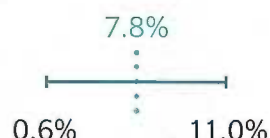
1-yr forecast to
December 31, 2015



Prediction average

6.5%

4-yr forecast to
December 31, 2018



Prediction average

7.2%

MSCI EAFE (C\$) TOTAL RETURN



One-year return to
December 2014

4.1%

1-yr forecast to
December 31, 2015



Prediction average

6.8%

4-yr forecast to
December 31, 2018



Prediction average

8.5%

4

INVESTMENT BENCHMARK RETURNS

II. Equities (continued)

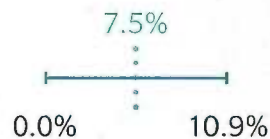
MSCI ACWI (C\$) TOTAL RETURN



One-year return to
December 2014

14.1%

1-yr forecast to
December 31, 2015



Prediction average

6.9%

4-yr forecast to
December 31, 2018



Prediction average

7.2%

MSCI EMERGING MARKETS (C\$) TOTAL RETURN



One-year return to
December 2014

7.0%

1-yr forecast to
December 31, 2015



Prediction average

7.6%

4-yr forecast to
December 31, 2018



Prediction average

8.1%



4

INVESTMENT BENCHMARK RETURNS

III. Alternatives

CANADIAN DIRECT REAL ESTATE



YTD to September
2014

4.3%

Benchmark: IPD Canada All Property

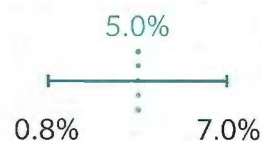
1-yr forecast to
December 31, 2015



Prediction average

3.8%

4-yr forecast to
December 31, 2018



Prediction average

4.5%

PRIVATE EQUITY

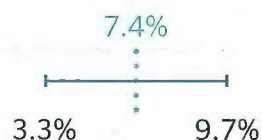


One-year return to
December 2014

9.2%

Benchmark: S&P Listed Private Equity (Global) (C\$) Index

1-yr forecast to
December 31, 2015



Prediction average

7.0%

4-yr forecast to
December 31, 2018



Prediction average

6.5%

HEDGE FUNDS



YTD to November
2014

3.3%

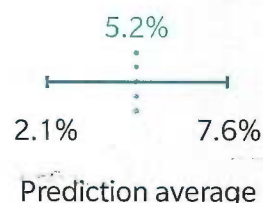
Benchmark: HFRI Fund Weighted Composite (US\$) Index

1-yr forecast to
December 31, 2015



4.8%

4-yr forecast to
December 31, 2018



5.2%

INFRASTRUCTURE



One-year return to
December 2014

23.2%

Benchmark: S&P Global Infrastructure (C\$) Index

1-yr forecast to
December 31, 2015



5.3%

4-yr forecast to
December 31, 2018



5.3%

5

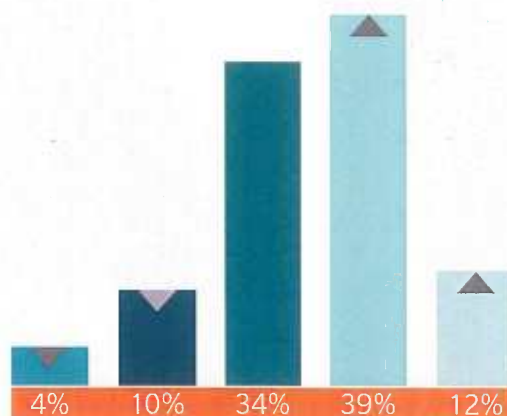
CAPITAL MARKETS

Bond yields

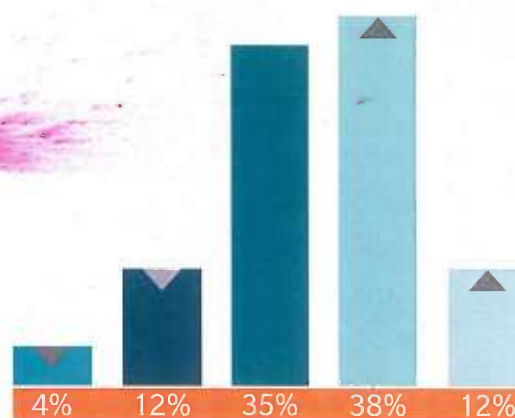
Expectations of managers: Interest rates increasing or decreasing over 2015

- Rates decline by 0.75% or more
- Rates decline by 0.25% to 0.75%
- Rates remain at current levels +/- 0.25%
- Rates increase by 0.25% to 0.75%
- Rates increase by 0.75% or more

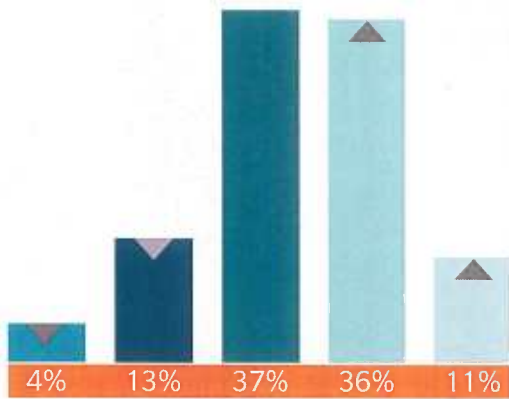
SHORT TERM (1-5 YEARS)



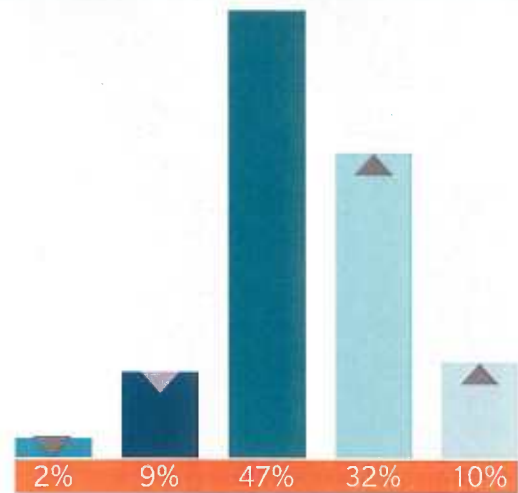
MID-TERM (5-10 YEARS)



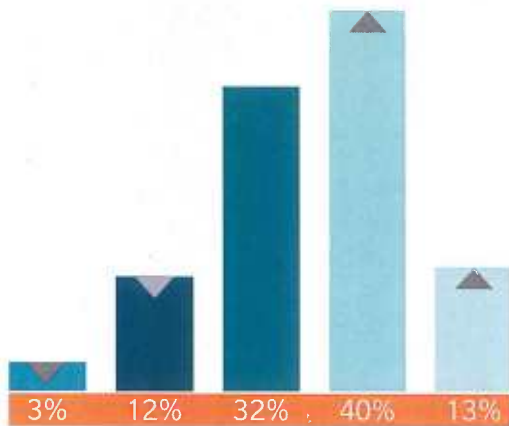
LONG TERM (10+ YEARS)



REAL RETURN BONDS



AAA/AA CANADIAN CORPORATES



5 CAPITAL MARKETS

Bond yields

SHORT TERM (1–5 YEARS)

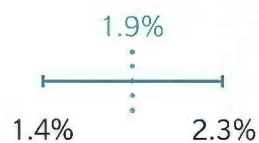


Yield as at
December 31, 2014

1.5%

FTSE TMX Canada Short Term

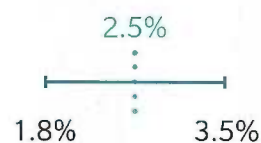
Forecasted at
December 31, 2015



Prediction average

1.9%

Forecasted at
December 31, 2018



Prediction average

2.6%

MID-TERM (5–10 YEARS)

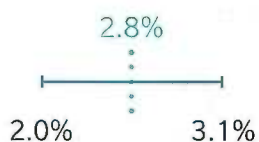


Yield as at
December 31, 2014

2.3%

FTSE TMX Canada Mid Term

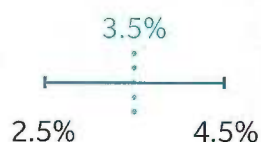
Forecasted at
December 31, 2015



Prediction average

2.7%

Forecasted at
December 31, 2018



Prediction average

3.4%

LONG TERM (10+ YEARS)



Yield as at
December 31, 2014

3.2%

FTSE TMX Canada Long Term

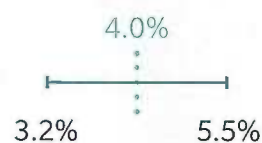
Forecasted at
December 31, 2015



Prediction average

3.5%

Forecasted at
December 31, 2018



Prediction average

4.1%

REAL RETURN BONDS



Yield as at
December 31, 2014

0.6%

FTSE TMX Canada Real Return

Forecasted at
December 31, 2015



Prediction average

0.8%

Forecasted at
December 31, 2018



Prediction average

1.3%

AAA/AA CANADIAN CORPORATES

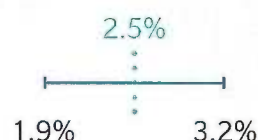


Yield as at
December 31, 2014

1.9%

FTSE TMX Canada Universe Corporate AAA/AA

Forecasted at
December 31, 2015



Prediction average

2.5%

Forecasted at
December 31, 2018



Prediction average

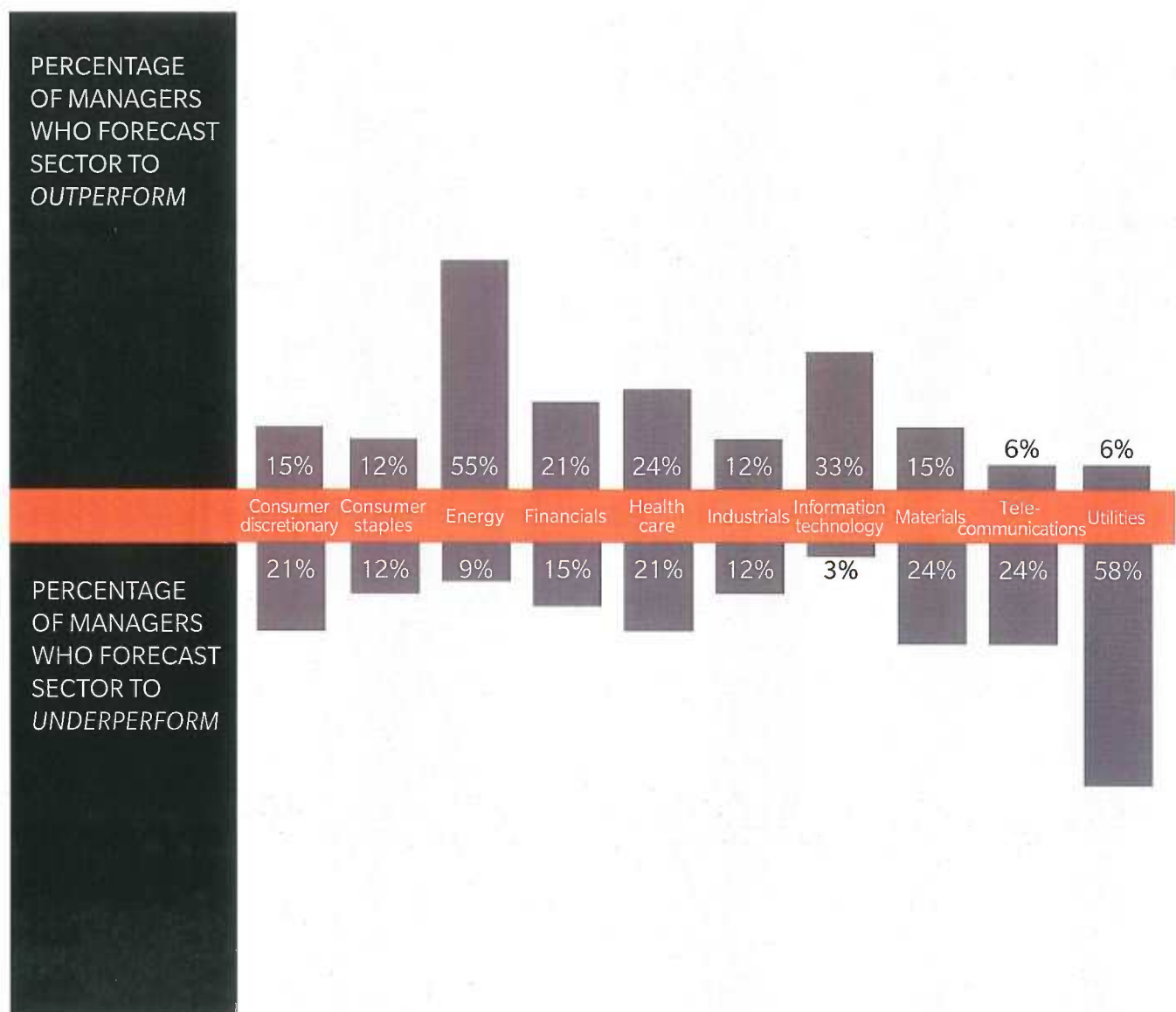
3.3%

5 CAPITAL MARKETS

Expectations of managers: Global equity strategies to outperform or underperform in 2015



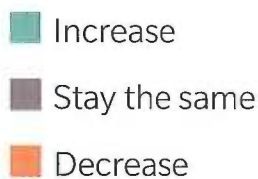
Expectations of managers: Top- and bottom-performing sectors of the S&P/TSX Composite Index in 2015



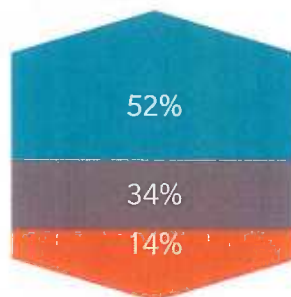
6

ASSET ALLOCATION

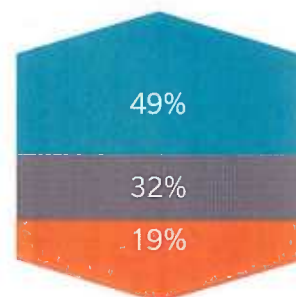
Managers were asked if they believe the following allocations would increase, decrease or stay the same in 2015



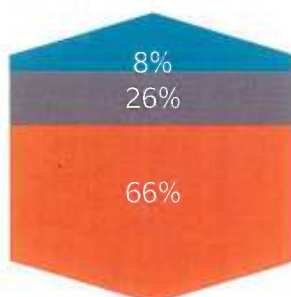
DURATION-MATCHED
FIXED INCOME



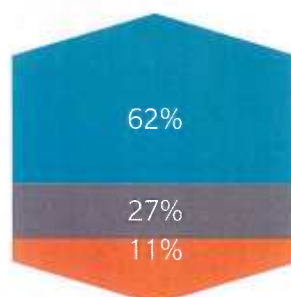
CORE PLUS FIXED
INCOME



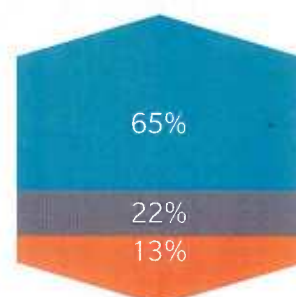
CANADIAN EQUITIES



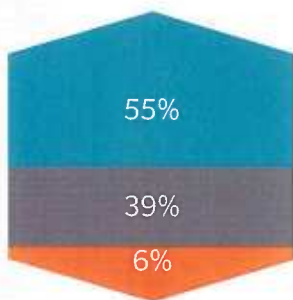
GLOBAL DEVELOPED
MARKET EQUITIES



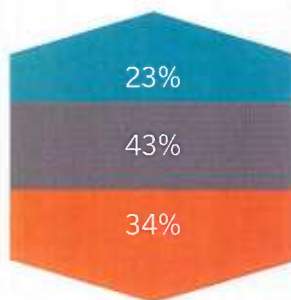
EMERGING MARKETS



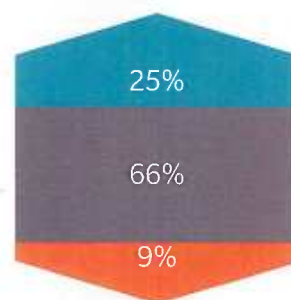
LOW VOLATILITY



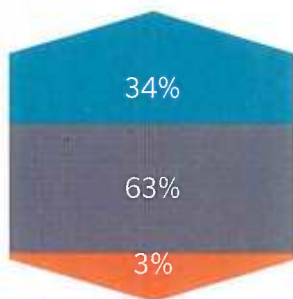
SMALL CAP



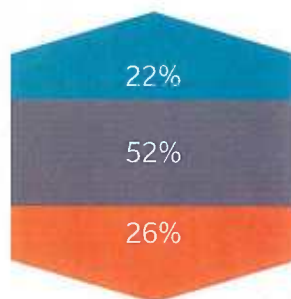
CANADIAN DIRECT REAL ESTATE



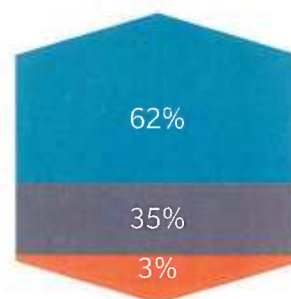
PRIVATE EQUITY



HEDGE FUNDS

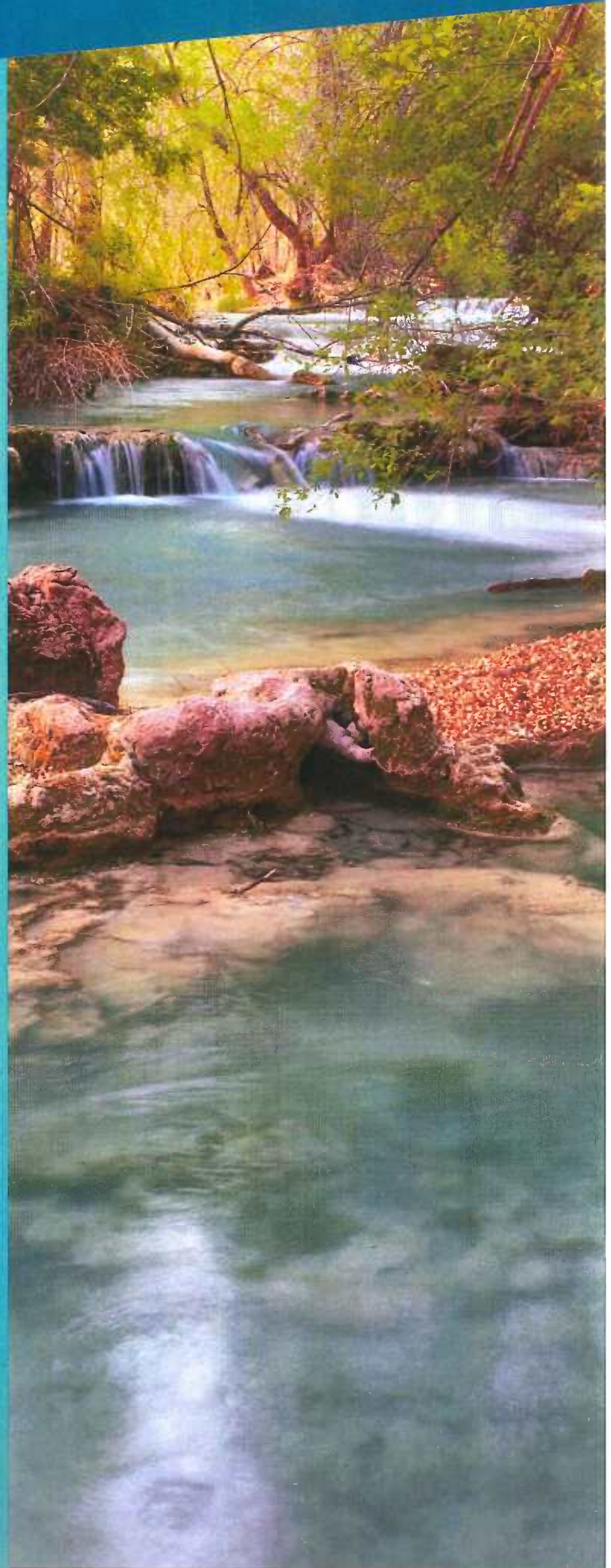


INFRASTRUCTURE

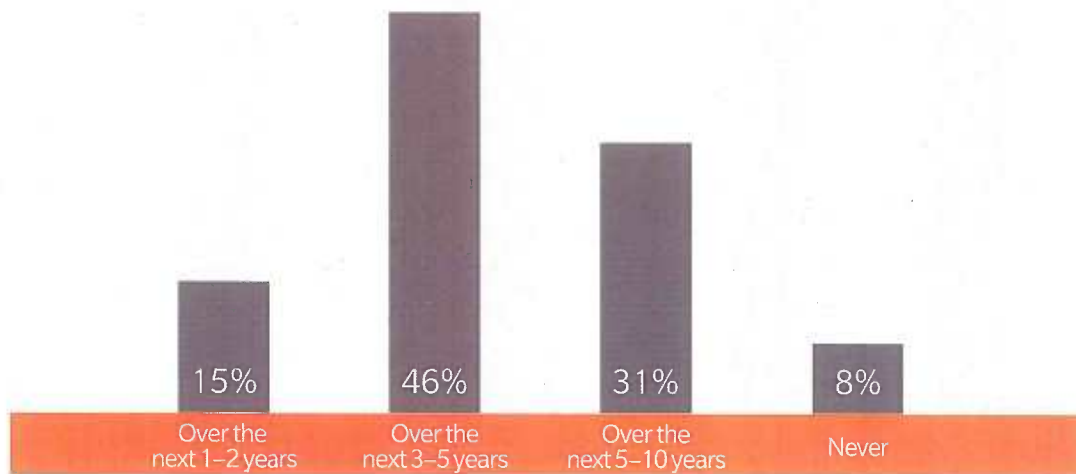


7

ENVIRONMENTAL, SOCIAL AND GOVERNANCE CONSIDERATIONS



Managers were asked in what time frame they believed the integration of environmental, social and corporate governance (ESG) performance indicators will become a common component of mainstream investment decision-making:



8

PARTICIPANTS

The following list of 46 investment management firms participated in Mercer's 2015 Fearless Forecast Survey:

- Acadian Asset Management
- Addenda Capital
- AEGON Capital Management
- AFG Investments Inc.
- AllianceBernstein
- AlphaFixe Capital
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- Baker Gilmore
- Beutel Goodman
- BlackRock
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- Connor, Clark and Lunn Investment Management Ltd.
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- Global Thematic Partners
- GMO LLC
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CALGARY

222 - 3rd Avenue SW, Suite 1200

Calgary, Alberta T2P 0B4

Tel: +1 403 269 4945

QUÉBEC

2954 Laurier Blvd., Suite 690

Québec, Québec G1V 4T2

Tel: + 418 658 3435

HALIFAX

1801 Hollis Street, Suite 1300

Halifax, Nova Scotia B3J 3N4

Tel: +1 902 429 7050

TORONTO

161 Bay Street, P.O. Box 501

Toronto, Ontario M5J 2S5

Tel: +1 416 868 2000

MONTRÉAL

1981 McGill College Avenue, Suite 800

Montréal, Québec H3A 3T5

+1 514 285 1802

VANCOUVER

550 Burrard Street, Suite 900

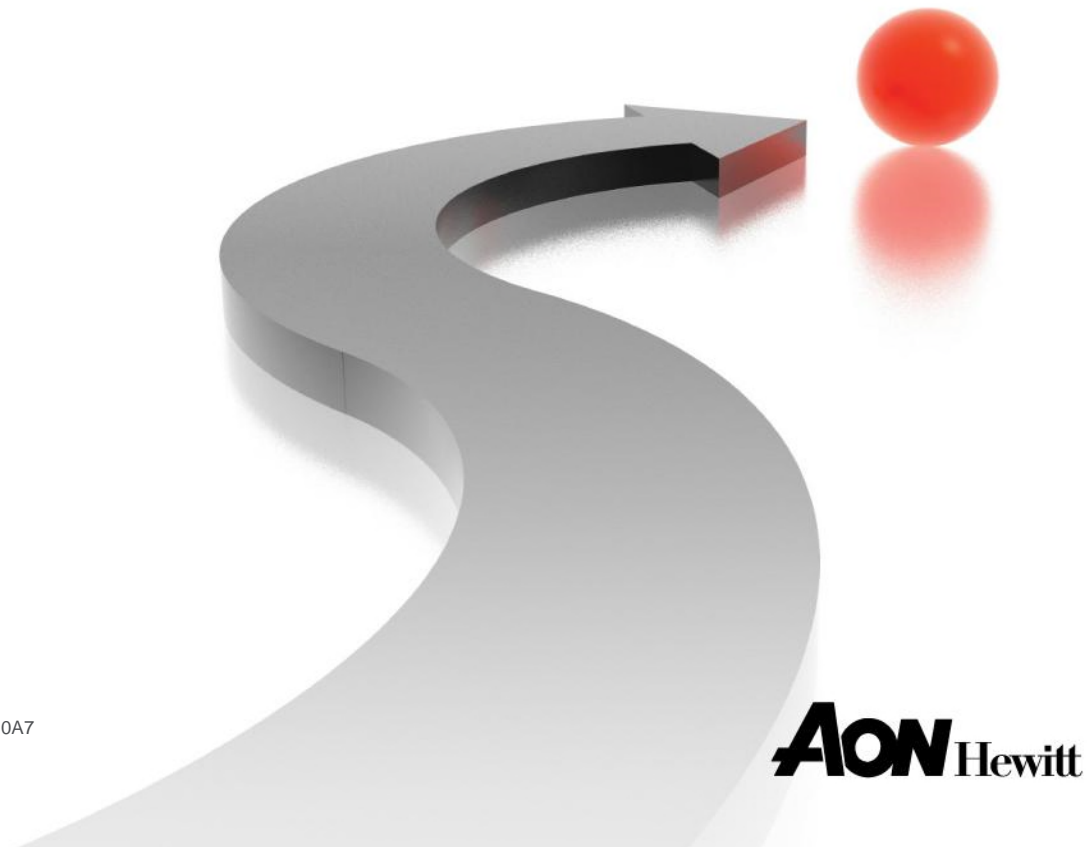
Vancouver, British Columbia V6C 3S8

Tel: +1 604 683 6761

Aon Hewitt Capital Market Assumptions & Methodology (Canadian Version)

10-Year Horizon as at September 30, 2015

Produced October 6, 2015



Aon Hewitt

700 De La Gauchetière Street West | Suite 1800 | Montreal, Quebec H3B 0A7
Telephone: 514-982-4806 | Fax: 514-845-0678 | www.aonhewitt.com

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Section 1: Introduction

This document summarizes Aon Hewitt Canada's **10-year** forward-looking capital market assumptions ("CMAs") that are to be used in the determination of strategic portfolio allocations and related modeling or projection studies. The methodology described herein is also the basis of longer-term 30-yr CMAs that can be used to determine an expected long-term portfolio return for the purposes of performing an actuarial valuation.

The CMAs presented in this document represent Aon Hewitt Canada's best-estimate view of future economic conditions and are established by a national committee comprised of Investment and Risk Management practitioners. The determination of the CMAs involves a thorough analysis of all available quantitative and qualitative resources including, but not limited to, in-house analyses of historical returns, external analyses of long-term historical returns presented in published research articles, the actual state of the market and the good judgment of the national assumptions committee. Additionally, the CMAs reflect the analyses and research done by Aon Hewitt investment and risk management colleagues around the globe and are checked for global consistency.

Notes:

1. In order to be as accurate and up-to-date as possible, the assumptions are reviewed and, if needed, adjusted, on a monthly basis.
2. The return assumptions presented in this document are for indices only and do not consider active management fees or expected value added except in the case of certain alternative asset classes (e.g. hedge funds) where the return assumptions are assumed net of fees and the added value is inherent to the asset class.

Section 2: Capital Market Benchmarks

The following are the standard market indices used as return proxies for each asset class in the Aon Hewitt Model:

Asset Class	Benchmark Index
<i>Inflation</i>	Consumers Price Index (CPI)
<i>Fixed Income</i>	
91-day T-Bills	FTSE TMX Canada 91 Day TBill Index
Banker's Acceptance	Bank of Canada - V39071
Overall Real Return Bonds	FTSE TMX Canada Real Return Bond Index
Short-Term Federal Bonds	FTSE TMX Canada Short Term Federal Bond Index
Short-Term Provincial Bonds	FTSE TMX Canada Short Term Provincial Bond Index
Short-Term Municipal Bonds	FTSE TMX Canada Short Term Municipal Bond Index
Short-Term Corporate AAA/AA Bonds	FTSE TMX Canada Short Term Corporate AA+ Bond Index
Short-Term Corporate A Bonds	FTSE TMX Canada Short Term Corporate A Bond Index
Short-Term Corporate BBB Bonds	FTSE TMX Canada Short Term Corporate BBB Bond Index
Short-Term Government Bonds	FTSE TMX Canada Short Term Government Bond Index
Short-Term Corporate Bonds	FTSE TMX Canada Short Term Corporate Bond Index
Mortgages	FTSE TMX Canada Short Term Corporate Bond Index
Short-Term Bonds	FTSE TMX Canada Short Term Overall Bond Index
Mid-Term Federal Bonds	FTSE TMX Canada Mid Term Federal Bond Index
Mid-Term Provincial Bonds	FTSE TMX Canada Mid Term Provincial Bond Index
Mid-Term Municipal Bonds	FTSE TMX Canada Mid Term Municipal Bond Index
Mid-Term Corporate AAA/AA Bonds	FTSE TMX Canada Mid Term Corporate AA+ Bond Index
Mid-Term Corporate A Bonds	FTSE TMX Canada Mid Term Corporate A Bond Index
Mid-Term Corporate BBB Bonds	FTSE TMX Canada Mid Term Corporate BBB Bond Index

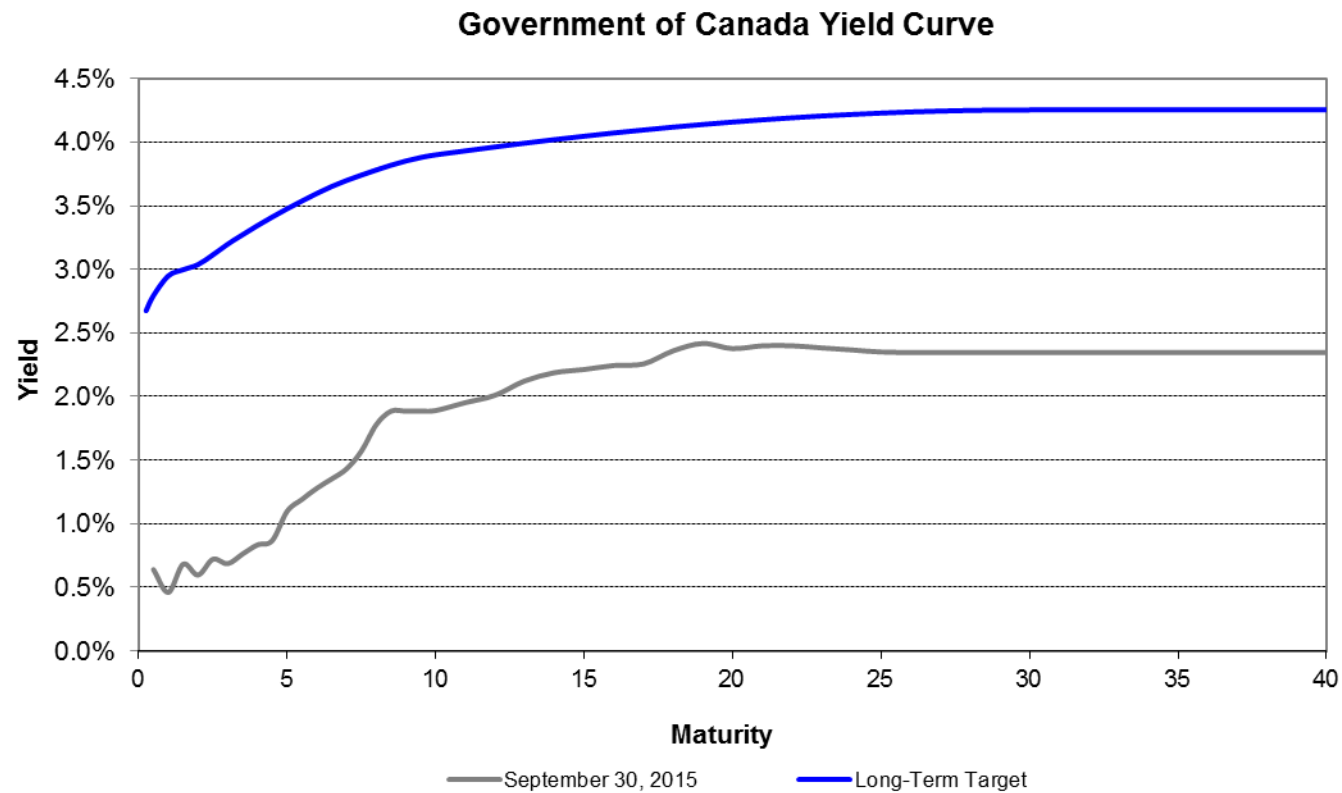
Section 2: Capital Market Benchmarks

Asset Class	Benchmark Index
Fixed Income	
Mid-Term Government Bonds	FTSE TMX Canada Mid Term Government Bond Index
Mid-Term Corporate Bonds	FTSE TMX Canada Mid Term Corporate Bond Index
Mid-Term Bonds	FTSE TMX Canada Mid Term Overall Bond Index
Long-Term Federal Bonds	FTSE TMX Canada Long Term Federal Bond Index
Long-Term Provincial Bonds	FTSE TMX Canada Long Term Provincial Bond Index
Long-Term Municipal Bonds	FTSE TMX Canada Long Term Municipal Bond Index
Long-Term Corporate AAA/AA Bonds	FTSE TMX Canada Long Term Corporate AA+ Bond Index
Long-Term Corporate A Bonds	FTSE TMX Canada Long Term Corporate A Bond Index
Long-Term Corporate BBB Bonds	FTSE TMX Canada Long Term Corporate BBB Bond Index
Long-Term Government Bonds	FTSE TMX Canada Long Term Government Bond Index
Long-Term Corporate Bonds	FTSE TMX Canada Long Term Corporate Bond Index
Long-Term Bonds	FTSE TMX Canada Long Term Overall Bond Index
Extra Long-Term Bonds	FTSE TMX Canada 20+ Strip Bond Index
Universe Federal Bonds	FTSE TMX Canada Federal Bond Index
Universe Provincial Bonds	FTSE TMX Canada Provincial Bond Index
Universe Municipal Bonds	FTSE TMX Canada Municipal Bond Index
Universe Corporate AAA/AA Bonds	FTSE TMX Canada Corporate AA+ Bond Index
Universe Corporate A Bonds	FTSE TMX Canada Corporate A Bond Index
Universe Corporate BBB Bonds	FTSE TMX Canada Corporate BBB Bond Index
Universe Government Bonds	FTSE TMX Canada All Government Bond Index
Universe Corporate Bonds	FTSE TMX Canada All Corporate Bond Index
Universe Bonds	FTSE TMX Canada Universe Bond Index
Global Bonds	Barclays Global Aggregate (CAD)
High Yield Bonds (USD), hedged	Merrill Lynch, High Yield Master II (USD)
Bank Loans (USD), hedged	CS Leveraged Loan Index (USD)
Emerging Market Debt (USD), hedged	JPM EMBI Global Diversified (USD)

Section 2: Capital Market Benchmarks

Asset Class	Benchmark Index
Equities	
Canadian Equities	S&P/TSX Capped Composite
Canadian Equities, Small Cap	BMO - Nesbitt Burns, Small Cap, weighted
Canadian Equities, Low Volatility	S&P/TSX Composite Low Volatility Index
U.S. Equities, unhedged	S&P 500 (CAD)
U.S. Equities, hedged	S&P 500 (USD)
U.S. Equities, Small/Mid Cap, unhedged	Russell 2500 (CAD)
U.S. Equities, Small Cap, unhedged	Russell 2000 (CAD)
U.S. Equities, Low Volatility, unhedged	S&P 500 Low Volatility Index (CAD)
International Equities, unhedged	MSCI - E.A.F.E. (CAD)
International Equities, hedged	MSCI - E.A.F.E. (Local Currency)
International Equities, Small Cap, unhedged	MSCI - E.A.F.E. small cap (CAD)
International Equities, Low Volatility, unhedged	S&P International Developed Low Volatility (CAD)
Global Equities, unhedged	MSCI - World (CAD)
Global Equities, hedged	MSCI - World (Local Currency)
Global Equities, Small Cap, unhedged	MSCI - World, Small Cap (CAD)
Global Equities, Small Cap, hedged	MSCI - World, Small Cap (Local Currency)
All Country Index (ACWI)	MSCI - ACWI (CAD)
All Country Index (ACWI), partially hedged	MSCI - ACWI, Partially Hedged
Emerging Markets, unhedged	MSCI - Emerging Markets, Free, Gross (CAD)
Emerging Markets, Low Volatility, unhedged	S&P Emerging Markets Low Volatility (CAD)
Alternatives	
Commodities, hedged	Goldman Sachs Light Energy Commodity Index (USD)
Canadian Real Estate (Direct)	REALpac/IPD Canada Property Index
U.S. Real Estate (Direct), hedged	NCREIF Property Index (USD)
Global Real Estate (REITS), unhedged	EPRA / NAREIT (CAD)
Infrastructure (Direct), hedged	n/a
Infrastructure (Indirect), unhedged	UBS 50/50 Infrastructure Index (CAD)
Private Equity, hedged	Cambridge & Associates Private Equity (USD)
Farmland, hedged	NCREIF Farmland Index (USD)
Timberland, hedged	NCREIF Timberland Index (USD)
Hedge Funds - Global Macro, hedged	CSFB/Tremont Global Macro (USD)
Hedge Funds - Market Neutral, hedged	CSFB/Tremont Equity Market Neutral (USD)
Hedge Funds - Managed Futures, hedged	CISDM CTA Equally Weighted Index (USD)
Multi-Strategy Hedge Fund	Custom Index (USD)
Diversified Growth Fund	Custom Index (USD)

Section 3: Term Structure Environment



Section 4: Expected Returns, Yields, Standard Deviations and Correlations

1. Long-term target yield-to-maturities for key bonds

Index	Expected Long-Term Yield	
	Assumption	Source
Inflation	2.0%	Bank of Canada target
Short Term (91-day T-Bills)	2.67%	Based on the historical spread to 10-year federal bonds
7-year federal bonds (CANSIM V122542)	3.70%	Based on the historical spread to 10-year federal bonds
10-year federal bonds (CANSIM V122543)	3.90%	Based on inflation (2.0%) plus target Real GDP growth (1.9%)
>10-year federal bonds (CANSIM V122544)	4.21%	Based on the historical spread to 10-year federal bonds
Federal LT RRB (CANSIM v122553)	2.01%	Based on the historical spread between Bank of Canada long-term benchmark bond yield (V122544) and federal long-term real return bond (V122553), which can be interpreted as expected inflation and a bias reflecting a cost of hedging inflation*

* The cost of hedging reflects the fact that purchasers of real return bonds in the market are prepared to pay a price for the protection against inflation risk as part of a buy and hold strategy.

Section 4: Expected Returns, Yields, Standard Deviations and Correlations

2. Expected returns, standard deviations and downside risks

Asset Class	Expected 10-yr Annualized Return (Compound) as at September 30, 2015	10-yr Average Annual Std. Deviation as at September 30, 2015
	Source	Source
Realized Inflation	Based on consensus forecasts and on the inflation risk premium implied by market break-even inflation rates	Estimated from historical data series (1987-2014)
Canadian Fixed Income	Expected returns are generated by Aon Hewitt's proprietary bond model. Historical money market yields, actual yield curve and expected long term nominal and real return YTM's are used to calibrate the model that generates yield curve movements. Expected returns are then derived from the yield curve movements	Generated by the same model that generated the expected fixed income returns (tested against historical numbers for reasonability)
Global Bonds	Similar expected return to Canadian Bonds adjusted for the inter-country interest rate differential representing an unhedged investment	Estimated from historical data series (1990-2014)
High Yield Bonds	Derived from a U.S. 5-yr bond yield, plus a credit spread and net upgrade benefit, less a provision for default	Estimated from historical data series (1987-2014)
Bank Loans	Sum of the floating rate, considering floors, credit spreads and changes in price, less the net effect of defaults	Estimated from historical data series (2007-2014) ¹
Emerging Market Debt	Derived from a U.S. mid-term bond yield, plus a credit spread, less a provision for default	Estimated from historical data series (1997-2014)

¹ Historical data is available since 1992. From 1992 to 2007, the historical returns exhibit very low volatility. Beginning in 2007, volatility has significantly increased and returns on bank loans have become highly correlated with those of high-yield bonds. We have chosen to ignore the period 1992-2007.

Section 4: Expected Returns, Yields, Standard Deviations and Correlations

Asset Class	Expected 10-yr Annualized Return (Compound)	10-yr Average Annual Standard Deviations
	Source	Source
Canadian Equities	Forecast earnings are used to calculate the equity market cash flows. The forecast cash flows are then discounted and their aggregated value is equated to the current level of the equity market to arrive at an expected return	Estimated from historical data series (1987-2014)
Canadian Equities, Small cap	Annualized premium of 0.5% over large cap Canadian equities reflecting the asset class' higher volatility and higher earnings growth potential	Estimated from historical data series (1987-2014)
Canadian Equities, Low Volatility	Expected return such that the Sharpe ratio is the same as for Canadian Equities	Estimated from historical data series (1997-2014)
U.S. Equities	Simulated currency returns are applied to the local currency distribution to arrive at an estimate in CAD	Standard deviation of the simulated unhedged distribution (1987-2014)
U.S. Equities, hedged	Forecast earnings are used to calculate the equity market cash flows. The forecast cash flows are then discounted and their aggregated value is equated to the current level of the equity market to arrive at an expected return	Estimated from historical data series in local currency (1987-2014)
U.S. Equities, Mid/Small cap	Annualized premium of 0.25% over large cap U.S. equities (USD) reflecting the asset class' higher volatility and higher earnings growth potential. The return is then translated into CAD	Standard deviation of the simulated unhedged distribution (1987-2014)
U.S. Equities, Small cap	Annualized premium of 0.5% over large cap U.S. equities (USD) reflecting the asset class' higher volatility and higher earnings growth potential. The return is then translated into CAD	Standard deviation of the simulated unhedged distribution (1987-2014)
U.S. Equities, Low Volatility	Expected return such that the Sharpe ratio is the same as for U.S. Equities	Estimated from historical data series in local currencies (1990-2014)

Section 4: Expected Returns, Yields, Standard Deviations and Correlations

Asset Class	Expected 10-yr Annualized Return (Compound)	10-yr Average Annual Standard Deviations
	Source	Source
International Equities	Simulated currency returns are applied to the local currency distribution to arrive at an estimate in CAD	Standard deviation of the simulated unhedged distribution (1987-2014)
International Equities, hedged	Forecast earnings are used to calculate the cash flows for the main equity markets comprising the EAFE index. The forecast cash flows are then discounted and their aggregated value is equated to the current level of the equity markets to arrive at an expected return for each of the economies. They are then combined to form the EAFE return, taking into account half of the diversification	Estimated from historical data series in local currencies (1987-2014)
International Equities, small cap	Annualized premium of 0.5% over large cap International equities (local currency) reflecting the asset class' higher volatility and higher earnings growth potential. The return is then translated into CAD	Standard deviation of the simulated unhedged distribution (1993-2014)
International Equities, Low Volatility	Expected return such that the Sharpe ratio is the same as for International Equities	Estimated from historical data series in local currencies (1991-2014)
Global Equities	Based on the return of a portfolio comprised of a 50% allocation to U.S. equities (S&P 500) and a 50% allocation to International equities (MSCI – EAFE)	Standard deviation of an unhedged portfolio comprised of 50% U.S. equities and 50% International equities
Global Equities, hedged	Based on the return of a portfolio comprised of a 50% allocation to U.S. equities (S&P 500 USD) and a 50% allocation to International equities (MSCI – EAFE Local)	Standard deviation of a hedged portfolio comprised of 50% U.S. equities and 50% International equities
Global Equities, Small Cap.	Based on the return of a portfolio comprised of a 50% allocation to U.S. equities Small Cap. (Russell 2000) and a 50% allocation to International equities Small Cap. (MSCI – EAFE, Small Cap.)	Standard deviation of an unhedged portfolio comprised of 50% U.S. equities Small Cap. and 50% International equities Small Cap.

Section 4: Expected Returns, Yields, Standard Deviations and Correlations

Asset Class	Expected 10-yr Annualized Return (Compound)	10-yr Average Annual Standard Deviations
	Source	Source
Global Equities, Small Cap., hedged	Based on the return of a portfolio comprised of a 50% allocation to U.S. equities Small Cap. (Russell 2000 USD) and a 50% allocation to International equities Small Cap. (MSCI – EAFE, Small Cap. Local)	Standard deviation of a hedged portfolio comprised of 50% U.S. equities Small Cap. and 50% International equities Small Cap.
All Country World Index (ACWI)	Based on the return of a portfolio comprised of a 88% allocation to Global equities (MSCI – World) and a 12% allocation to Emerging markets (MSCI - Emerging Markets)	Standard deviation of an unhedged portfolio comprised of 88% Global equities (MSCI – World) and 12% Emerging markets (MSCI - Emerging Markets)
All Country World Index (ACWI), partially hedged	Based on the return of a portfolio comprised of a 88% allocation to Global equities (MSCI – World Local) and a 12% allocation to emerging markets (MSCI - Emerging Markets)	Standard deviation of a partially hedged portfolio comprised of 88% Global (MSCI – World Local) equities and 12% Emerging markets (MSCI - Emerging Markets)
Emerging Markets	Long term earnings growth assumptions are established for each of the main countries and combined into a composite to forecast earnings and calculate the equity market cash flows. The aggregated value of discounted forecast cash flows is equated to the current level of the equity market to arrive at an expected return	Estimated from historical data series (1988-2014)
Emerging Markets, Low Volatility	Expected return such that the difference in expected return between Emerging Markets and Emerging Markets low volatility is the same as the difference in expected return between International and International low volatility equities	Estimated from historical data series (1997-2014)
Commodities, hedged	Derived from LIBOR plus U.S. inflation	Estimated from historical data series (1987-2014)

Section 4: Expected Returns, Yields, Standard Deviations and Correlations

Asset Class	Expected 10-yr Annualized Return (Compound)	10-yr Average Annual Standard Deviations
	Source	Source
Canadian Real Estate (Direct)	Based on an estimated income yield, real rental growth, expected inflation, and management fees	Historical standard deviation adjusted upward to reflect appraisal smoothing (1987-2014)
U.S. Real Estate (Direct), hedged	Based on an estimated income yield, real rental growth, expected inflation, and management fees	Historical standard deviation adjusted upward to reflect appraisal smoothing (1987-2014)
Global REITS, unhedged	Discount of 1% to the expected return on Global Equities reflecting the asset class' lower beta	Estimated from historical data series (1990-2014)
Infrastructure (Listed), unhedged	Discount of 1% to the expected return on Global Equities reflecting the asset class' lower beta	Estimated from historical data series (1995-2014)
Infrastructure (Direct), hedged	Based on current income yield, expected inflation, 50% leverage, cost of financing and management fees	Derived from the standard deviation of Real Estate, Global REITS and Listed Infrastructure. Adjusted for leverage
Private Equity	We model a diversified portfolio with allocations to leveraged buyouts, venture capital, mezzanine debt and distressed debt. Return assumptions are formulated for each strategy based on an analysis of the exposure of each strategy to various market factors with associated risk premiums	Standard deviation such that the Sharpe ratio is the same as that of U.S. equities, hedged
Farmlands, hedged	Based on current income yield, expected inflation and management fees	Historical standard deviation adjusted upward to reflect appraisal smoothing (1992-2014)
Timberlands, hedged	Based on current income yield, expected inflation and management fees	Historical standard deviation adjusted upward to reflect appraisal smoothing (1987-2014)

Section 4: Expected Returns, Yields, Standard Deviations and Correlations

Asset Class	Expected 10-yr Annualized Return (Compound)	10-yr Average Annual Standard Deviations
	Source	Source
Equity Market Neutral, hedged	A factor benchmark is estimated via a multivariate regression on cash, fixed income and equities. An assumed excess return is then added to the factor return based on the expected manager skill (alpha) of the average manager and a provision for fees is taken	Estimated from historical data series (1994-2014), adjusted upward following the views of the CMA Committee and hedge fund research team
Global Macro, hedged	A factor benchmark is estimated via a multivariate regression on cash, fixed income and equities. An assumed excess return is then added to the factor return based on the expected manager skill (alpha) of the average manager and a provision for fees is taken	Estimated from historical data series (1994-2014)
Managed Futures, hedged	A factor benchmark is estimated via a multivariate regression on cash, fixed income and equities. An assumed excess return is then added to the factor return based on the expected manager skill (alpha) of the average manager and a provision for fees is taken	Estimated from historical data series (1987-2014)

Section 4: Expected Returns, Yields, Standard Deviations and Correlations

3. Summary Statistics

The following table summarizes all asset class expected return and risk assumptions. Due to the impact of volatility on compounding, the level annual (year-over-year) return required to achieve the assumed geometric average is higher. This is illustrated in the table below.

Asset Class	10-yr Average Annual Return	10-yr Compound Return	Average Annual Standard Deviation	Average Annual CTE 95%
Inflation	1.9%	1.9%	1.3%	-0.6%
91-day T-Bills	1.3%	1.3%	1.0%	0.1%
Banker's Acceptance	1.6%	1.6%	1.1%	0.3%
Overall Real Return Bonds	1.0%	0.5%	10.1%	-18.8%
Short-Term Federal Bonds	1.3%	1.3%	1.6%	-1.6%
Short-Term Provincial Bonds	1.7%	1.7%	1.9%	-1.7%
Short-Term Municipal Bonds	1.9%	1.9%	2.0%	-1.7%
Short-Term AAA/AA Corporate Bonds	2.1%	2.1%	2.2%	-1.9%
Short-Term A Corporate Bonds	2.3%	2.3%	2.4%	-2.1%
Short-Term BBB Corporate Bonds	2.6%	2.5%	3.2%	-3.4%
Short-Term Government Bonds	1.4%	1.4%	1.7%	-1.6%

Section 4: Expected Returns, Yields, Standard Deviations and Correlations

Asset Class	10-yr Average Annual Return	10-yr Compound Return	Average Annual Standard Deviation	Average Annual CTE 95%
Short-Term Corporate Bonds	2.3%	2.2%	2.5%	-2.4%
Mortgages	2.3%	2.3%	2.5%	-2.3%
Short-Term Bonds	1.7%	1.7%	2.0%	-1.8%
Mid-Term Federal Bonds	1.4%	1.3%	3.9%	-6.7%
Mid-Term Provincial Bonds	2.1%	2.0%	4.9%	-7.9%
Mid-Term Municipal Bonds	2.3%	2.2%	5.2%	-8.2%
Mid-Term AAA/AA Corporate Bonds	2.4%	2.3%	4.9%	-7.4%
Mid-Term A Corporate Bonds	2.5%	2.4%	5.6%	-8.6%
Mid-Term BBB Corporate Bonds	2.9%	2.7%	6.8%	-10.4%
Mid-Term Government Bonds	1.8%	1.7%	4.4%	-7.3%
Mid-Term Corporate Bonds	2.7%	2.5%	6.0%	-9.3%
Mid-Term Bonds	2.0%	1.9%	4.8%	-7.7%
Long-Term Federal Bonds	1.0%	0.7%	7.9%	-15.2%
Long-Term Provincial Bonds	2.8%	2.2%	11.5%	-19.7%
Long-Term Municipal Bonds	3.3%	2.5%	12.4%	-20.8%
Long-Term AAA/AA Corporate Bonds*	2.4%	2.1%	7.6%	-13.0%
Long-Term A Corporate Bonds	3.8%	2.9%	13.8%	-22.7%
Long-Term BBB Corporate Bonds	4.6%	3.4%	15.5%	-25.0%
Long-Term Government Bonds	2.2%	1.7%	10.4%	-18.2%
Long-Term Corporate Bonds	4.1%	3.1%	14.3%	-23.4%
Long-Term Bonds	2.7%	2.0%	11.3%	-19.3%

*Considering the small number of long-term AAA/AA bonds, the behavior of this asset class is highly uncertain.

Section 4: Expected Returns, Yields, Standard Deviations and Correlations

Asset Class	10-yr Average Annual Return	10-yr Compound Return	Average Annual Standard Deviation	Average Annual CTE 95%
Extra Long-Term Bonds	3.2%	0.8%	22.9%	-36.5%
Universe Federal Bonds	1.3%	1.2%	3.4%	-5.7%
Universe Provincial Bonds	2.4%	2.1%	7.3%	-12.1%
Universe Municipal Bonds	2.5%	2.3%	6.9%	-11.0%
Universe AAA/AA Corporate Bonds	2.1%	2.1%	2.7%	-2.9%
Universe A Corporate Bonds	3.0%	2.7%	7.6%	-11.8%
Universe BBB Corporate Bonds	3.2%	2.9%	7.5%	-11.3%
Universe Government Bonds	1.8%	1.7%	5.3%	-8.7%
Universe Corporate Bonds	2.8%	2.6%	6.1%	-9.0%
Universe Bonds	2.1%	1.9%	5.5%	-8.7%
Global Bonds	2.1%	1.8%	8.1%	-14.7%
High Yield Bonds (USD)	4.3%	3.9%	9.4%	-14.8%
Bank Loans (USD)	3.2%	3.0%	6.3%	-11.2%
Emerging Market Debt (USD)	4.2%	3.7%	10.2%	-15.0%

Section 4: Expected Returns, Yields, Standard Deviations and Correlations

Asset Class	10-yr Average Annual Return	10-yr Compound Return	Average Annual Standard Deviation	Average Annual CTE 95%
Canadian Equities	8.0%	6.8%	17.0%	-26.5%
Canadian Equities, Small Cap	9.1%	7.3%	20.3%	-32.4%
Canadian Equities, Low Vol	6.9%	6.1%	14.0%	-20.3%
U.S. Equities	7.4%	6.4%	15.9%	-24.1%
U.S. Equities, hedged	7.9%	6.5%	18.0%	-28.0%
U.S. Equities, Small/Mid Cap	8.3%	6.6%	20.0%	-29.1%
U.S. Equities, Small Cap	8.8%	6.9%	21.6%	-31.2%
U.S. Equities, Low Vol	6.5%	5.8%	13.4%	-18.9%
Int'l Equities	7.7%	6.6%	15.8%	-26.0%
Int'l Equities, hedged	7.7%	6.3%	18.0%	-31.0%
Int'l Equities, Small Cap	8.6%	7.1%	18.6%	-28.5%
Int'l Equities, Low Vol	5.7%	5.3%	10.4%	-16.6%
Global Equities	7.6%	6.6%	14.7%	-23.2%
Global Equities, hedged	7.8%	6.5%	17.3%	-28.4%
Global Equities, Small Cap	8.7%	7.4%	17.7%	-26.3%
Global Equities, Small Cap, hedged	9.0%	7.2%	20.9%	-32.0%
All Country Index (ACWI)	7.9%	7.0%	15.0%	-23.3%
All Country Index (ACWI), partially hedged	8.1%	6.8%	17.5%	-28.3%
Emerging Markets	10.5%	7.9%	25.9%	-35.4%
Emerging Markets, Low Vol	7.6%	6.5%	15.7%	-23.2%

Section 4: Expected Returns, Yields, Standard Deviations and Correlations

Asset Class	10-yr Average Annual Return	10-yr Compound Return	Average Annual Standard Deviation	Average Annual CTE 95%
Commodities, hedged	4.1%	3.1%	15.0%	-26.5%
Canadian Real Estate (Direct)	6.0%	5.3%	12.5%	-22.3%
U.S. Real Estate, hedged	7.4%	6.7%	12.5%	-20.0%
Global REITS (Listed-unhedged)	7.1%	5.6%	18.5%	-28.3%
Infrastructure (Direct), hedged	7.7%	6.2%	19.3%	-26.7%
Infrastructure (Listed-unhedged)	6.6%	5.6%	15.0%	-21.9%
Private Equity, hedged	11.9%	8.8%	28.7%	-35.4%
Farmlands, hedged	8.1%	7.2%	14.5%	-18.1%
Timberlands, hedged	5.0%	4.4%	12.0%	-17.4%
Equity Market Neutral, hedged	3.4%	3.1%	8.0%	-12.5%
Global Macro, hedged	4.9%	4.4%	10.5%	-15.0%
Managed Futures, hedged	4.9%	4.2%	13.6%	-19.5%
Multi-Strategy Hedge Fund, hedged	4.4%	4.2%	7.5%	-10.2%
Diversified Growth Fund, hedged	5.7%	5.3%	10.0%	-14.0%

Section 4: Expected Returns, Yields, Standard Deviations and Correlations

Select Monthly Correlations

	91-Day T-Bills	Mortgages	Long-Term Bonds	Universe Bonds	Global Bonds	High Yield Bonds	Bank Loans	Emerging Market Debt	Canadian Equities	Canadian Equities, Small Cap	U.S. Equities	U.S. Equities (hedged)	U.S. Equities, Mid/Small Cap	U.S. Equities, Small Cap	Int'l Equities	Int'l Equities (hedged)	Int'l Equities, Small Cap	Global Equities	Global Equities (hedged)	Global Equities, Small Cap	Global Equities, Small Cap, (hedged)	Emerging Markets	Commodities (hedged)	Canadian Real Estate (Direct)	U.S. Real Estate (hedged)	Global Real Estate (REITS)	Infrastructure (Direct)	Global Listed Infrastructure	Private Equity	Farmlands	Timberlands	HF - Market Neutral (hedged)	HF - Global Macro (hedged)	HF - Managed Futures (hedged)	Inflation		
91-Day T-Bills	1.0																																				
Mortgages	0.1	1.0																																			
Long-Term Bonds	0.1	0.3	1.0																																		
Universe Bonds	0.2	0.4	1.0	1.0																																	
Global Bonds	0.1	0.1	0.3	0.3	1.0																																
High Yield Bonds	(0.0)	0.1	0.2	0.2	(0.3)	1.0																															
Bank Loans	(0.1)	0.0	0.0	(0.0)	(0.4)	0.7	1.0																														
Emerging Market Debt	(0.0)	0.1	0.5	0.4	(0.2)	0.7	0.5	1.0																													
Canadian Equities	(0.0)	0.1	0.2	0.1	(0.3)	0.6	0.4	0.6	1.0																												
Canadian Equities, Small Cap	(0.0)	0.0	0.1	0.0	(0.4)	0.6	0.5	0.6	0.9	1.0																											
U.S. Equities	0.0	0.0	0.1	0.1	0.1	0.4	0.2	0.2	0.6	0.5	1.0																										
U.S. Equities (hedged)	0.0	0.0	0.1	0.1	(0.3)	0.6	0.4	0.5	0.8	0.7	0.9	1.0																									
U.S. Equities, Mid/Small Cap	(0.0)	0.0	0.1	0.0	(0.1)	0.5	0.3	0.4	0.7	0.7	0.8	0.8	1.0																								
U.S. Equities, Small Cap	(0.0)	0.0	0.0	(0.0)	(0.1)	0.5	0.3	0.3	0.7	0.7	0.8	0.8	1.0	1.0																							
Int'l Equities	(0.0)	0.0	0.1	0.0	0.1	0.4	0.3	0.4	0.6	0.5	0.6	0.6	0.6	0.5	1.0																						
Int'l Equities (hedged)	(0.1)	0.0	0.1	0.0	(0.4)	0.5	0.4	0.5	0.7	0.6	0.7	0.8	0.7	0.6	0.8	1.0																					
Int'l Equities, Small Cap	(0.1)	0.0	0.1	0.1	(0.0)	0.5	0.4	0.5	0.6	0.6	0.5	0.5	0.6	0.6	0.9	0.7	1.0																				
Global Equities	(0.0)	0.0	0.1	0.1	0.1	0.4	0.3	0.4	0.7	0.5	0.9	0.8	0.7	0.7	0.9	0.8	0.8	1.0																			
Global Equities (hedged)	(0.0)	0.0	0.1	0.1	(0.4)	0.6	0.5	0.5	0.8	0.7	0.8	0.9	0.8	0.7	0.8	1.0	0.7	0.9	1.0																		
Global Equities, Small Cap	(0.2)	0.0	0.0	(0.0)	(0.2)	0.6	0.5	0.4	0.7	0.7	0.8	0.8	0.9	0.9	0.9	0.8	0.9	0.9	0.8	1.0																	
Global Equities, Small Cap, (hedged)	(0.2)	(0.0)	(0.0)	(0.1)	(0.6)	0.7	0.6	0.6	0.8	0.8	0.7	0.9	0.8	0.8	0.8	0.9	0.8	0.9	0.9	1.0																	
Emerging Markets	0.1	0.1	0.1	0.1	(0.2)	0.5	0.3	0.6	0.6	0.6	0.5	0.6	0.6	0.6	0.6	0.7	0.6	0.6	0.7	0.8	0.8	1.0															
Commodities (hedged)	0.1	0.0	(0.0)	(0.0)	(0.3)	0.3	0.4	0.4	0.4	0.5	0.0	0.3	0.1	0.1	0.2	0.2	0.3	0.1	0.3	0.3	0.5	0.3	1.0														
Canadian Real Estate (Direct)	(0.2)	(0.1)	(0.0)	(0.1)	(0.3)	0.2	0.4	0.2	0.2	0.1	0.2	0.1	0.1	0.0	0.1	(0.1)	0.1	0.2	0.2	0.3	0.4	0.0	0.2	1.0													
U.S. Real Estate (Direct, hedged)	(0.2)	(0.2)	(0.1)	(0.2)	(0.4)	0.4	0.6	0.3	0.2	0.3	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.3	0.4	0.1	0.3	0.6	1.0												
Global Real Estate (REITS)	(0.1)	0.1	0.2	0.2	0.1	0.5	0.4	0.5	0.5	0.5	0.6	0.6	0.5	0.7	0.6	0.6	0.7	0.6	0.7	0.7	0.6	0.2	0.1	0.2	1.0												
Infrastructure (Direct) (hedged)	(0.2)	(0.2)	(0.1)	(0.2)	(0.4)	0.4	0.6	0.3	0.2	0.3	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.3	0.4	0.1	0.3	0.3	0.4	0.2	1.0										
Global Listed Infrastructure	(0.0)	0.1	0.2	0.2	0.2	0.4	0.2	0.4	0.4	0.3	0.5	0.4	0.5	0.5	0.7	0.5	0.6	0.6	0.5	0.7	0.6	0.4	0.1	0.1	0.2	0.6	0.2	1.0									
Private Equity	(0.1)	(0.1)	0.0	(0.0)	(0.4)	0.5	0.4	0.5	0.7	0.6	0.6	0.7	0.7	0.6	0.6	0.7	0.5	0.7	0.7	0.7	0.8	0.1	0.2	0.3	0.3	0.4	0.3	0.4	1.0								
Farmlands (hedged)	(0.1)	(0.1)	0.0	(0.0)	(0.1)	(0.0)	(0.1)	(0.1)	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1.0							
Timberlands (hedged)	0.2	0.0	0.0	0.0	0.2	(0.1)	(0.1)	0.1	0.0	(0.1)	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.0	(0.1)	0.0	(0.0)	0.0	(0.1)	(0.1)	(0.1)	0.0	0.2	0.3	1.0						
HF - Market Neutral (hedged)	0.2	0.1	0.0	0.0	(0.2)	0.4	0.3	0.3	0.4	0.4	0.3	0.5	0.3	0.3	0.4	0.4	0.4	0.5	0.4	0.5	0.3	0.4	(0.0)	0.1	0.3	0.1	0.2	0.3	(0.0)	0.1	1.0						
HF - Global Macro (hedged)	0.1	0.1	0.3	0.3	(0.1)	0.2	0.2	0.4	0.3	0.3	0.1	0.2	0.2	0.1	0.1	0.3	0.1	0.1	0.3	0.1	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.1	(0.0)	0.3	0.0	0.1	0.2	1.0			
HF - Managed Futures (hedged)	0.1	0.0	0.2	0.2	0.0	(0.1)	(0.1)	(0.0)	(0.0)	(0.0)	(0.2)	(0.1)	(0.2)	(0.2)	(0.1)	(0.0)	(0.1)	(0.0)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	0.2	(0.0)	(0.2)	(0.1)	(0.2)	(0.0)	(0.2)	0.0	0.1	0.2	0.4	1.0		
Inflation	0.2	0.0	(0.0)	(0.0)	(0.1)	(0.0)	0.2	0.1	0.1	0.1	0.1	(0.0)	0.0	0.0	(0.0)	0.0	0.0	(0.0)	0.0	(0.0)	0.1	0.0	0.2	(0.0)	0.2	(0.0)	0.2	(0.0)	0.2	0.0	0.0	(0.1)	(0.1)	0.1	0.1	(0.0)	1.0

Section 4: Expected Returns, Yields, Standard Deviations and Correlations

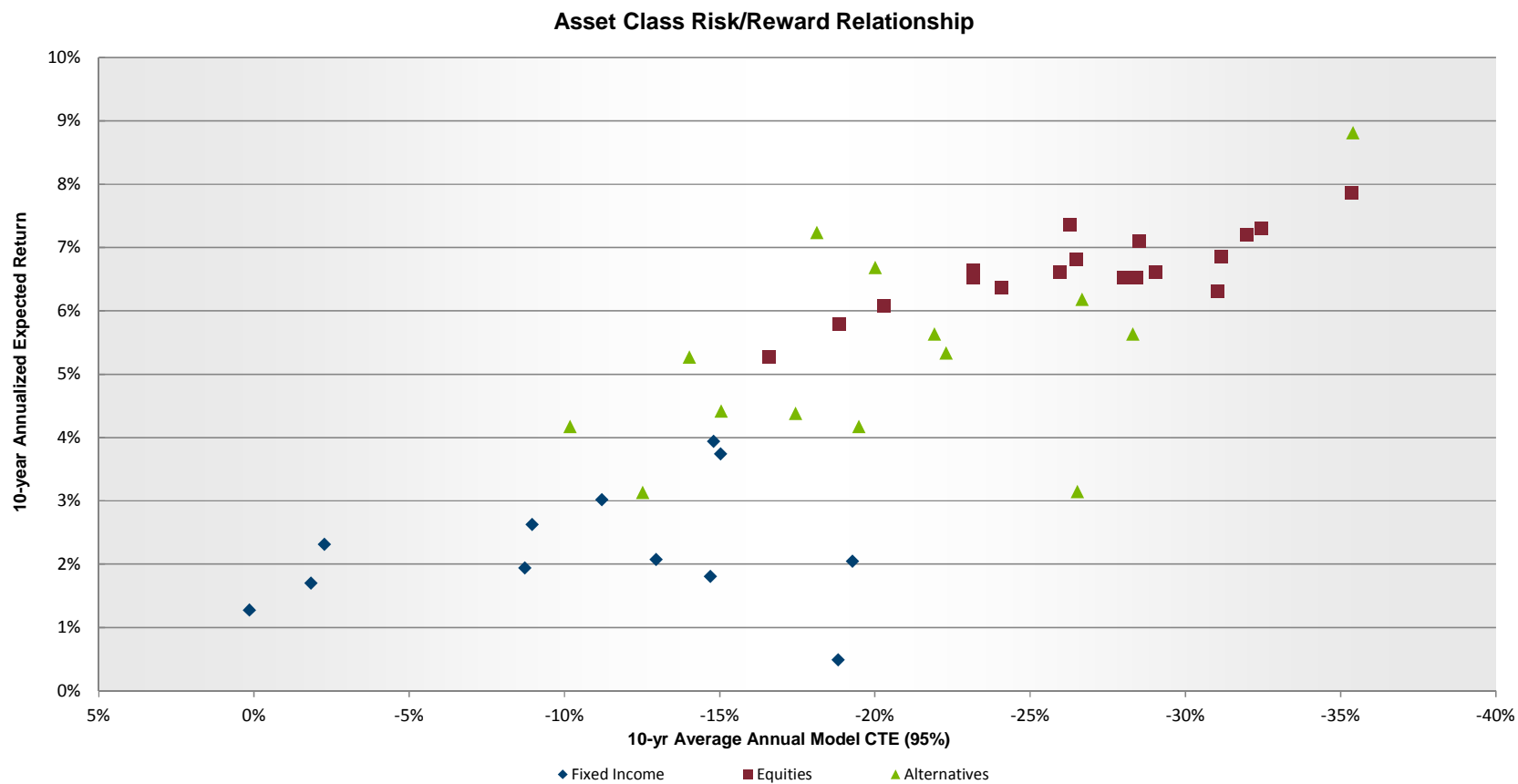
- Correlations and standard deviations (where applicable) are based on monthly (or quarterly where applicable) nominal returns of the indices and periods stated above for the periods ending November 30, 2014.
- Infrastructure (Direct) correlations are assumed equal to U.S. Direct Real Estate correlations.
- All expected returns, standard deviations and CTEs are rounded to one decimal place.

The **Sharpe Ratio** is defined as the excess of the asset's expected return over the risk free (Short Term) expected return, divided by the asset's standard deviation.

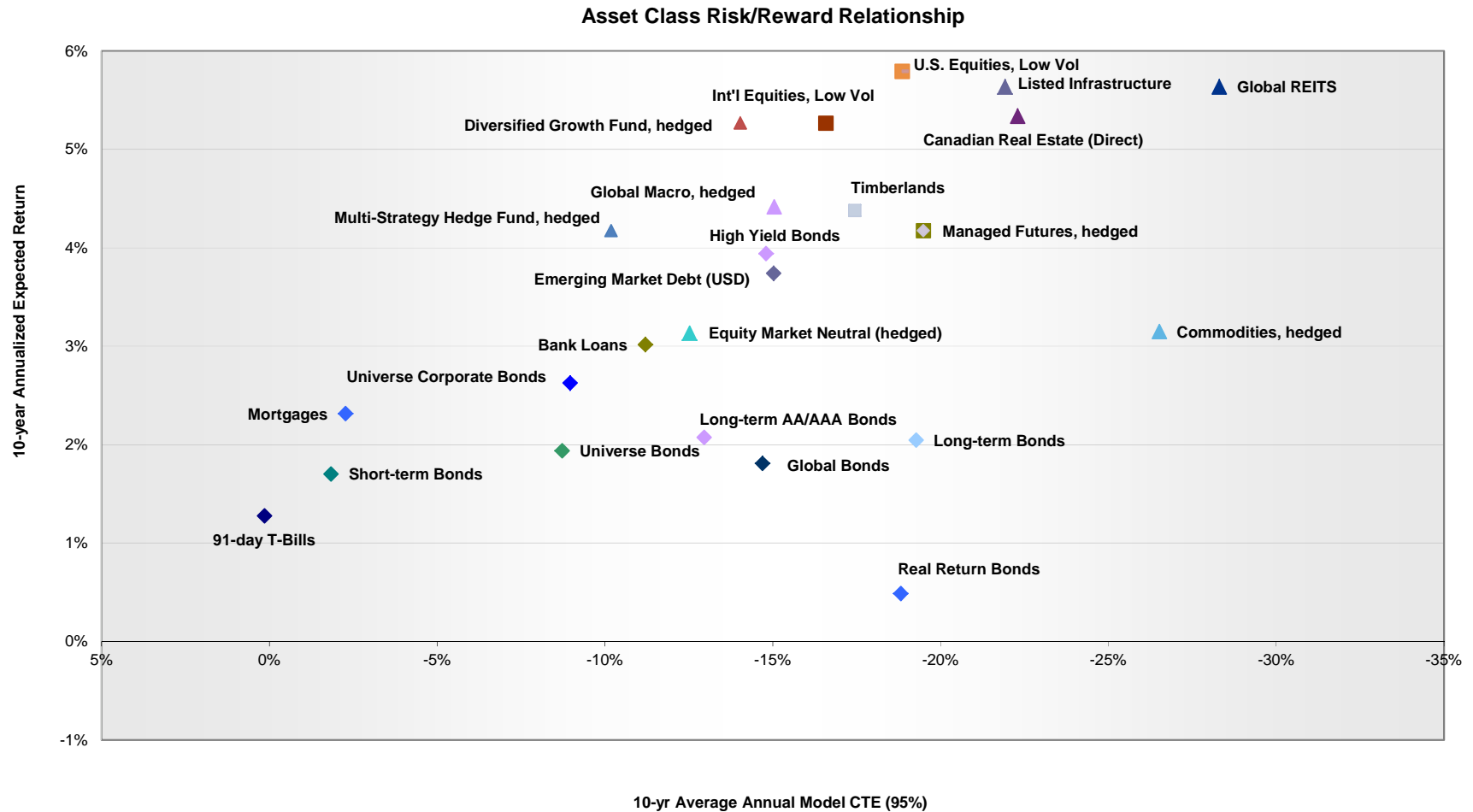
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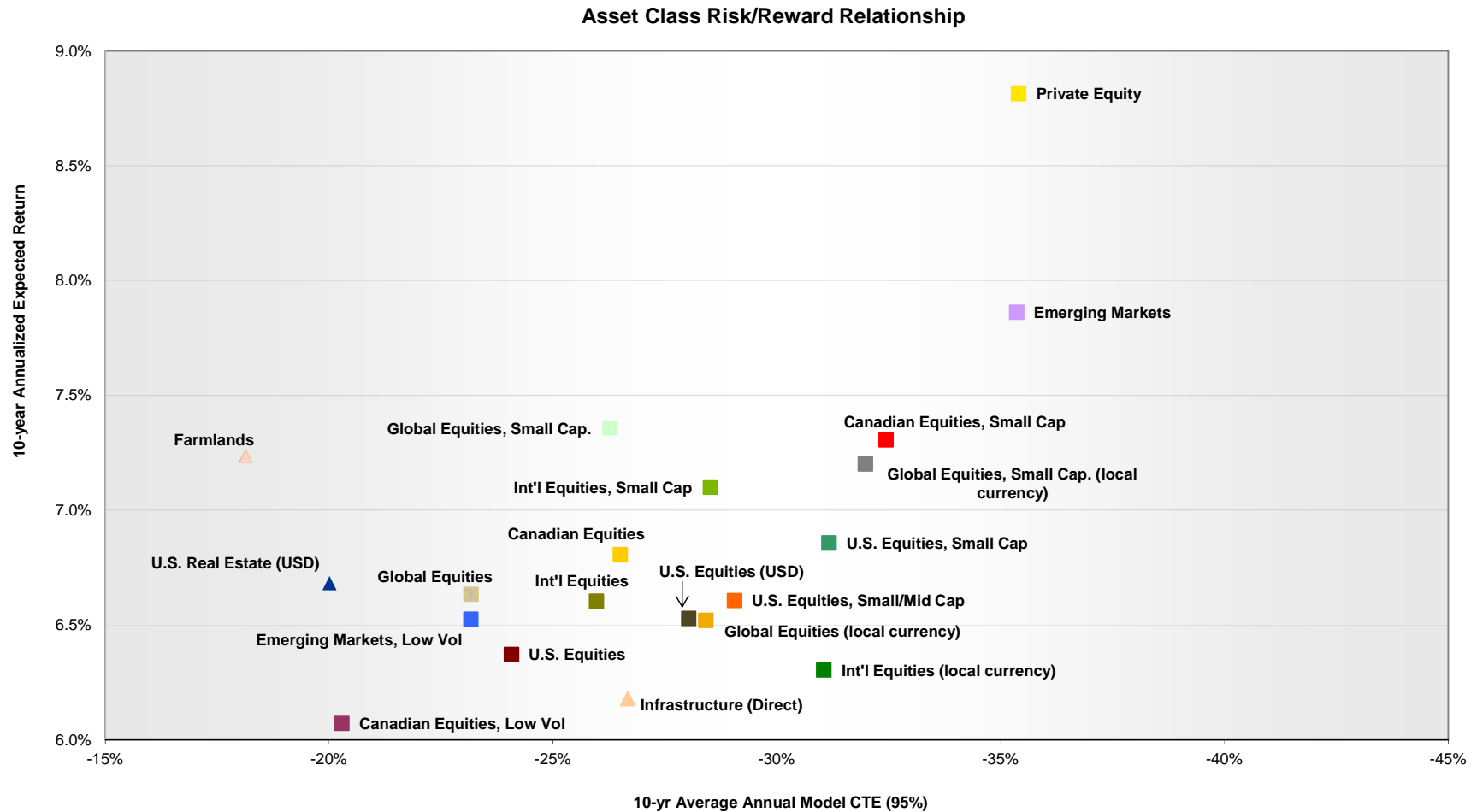
Appendix I: Asset Class Risk/Reward Relationship



Appendix I: Asset Class Risk/Reward Relationship

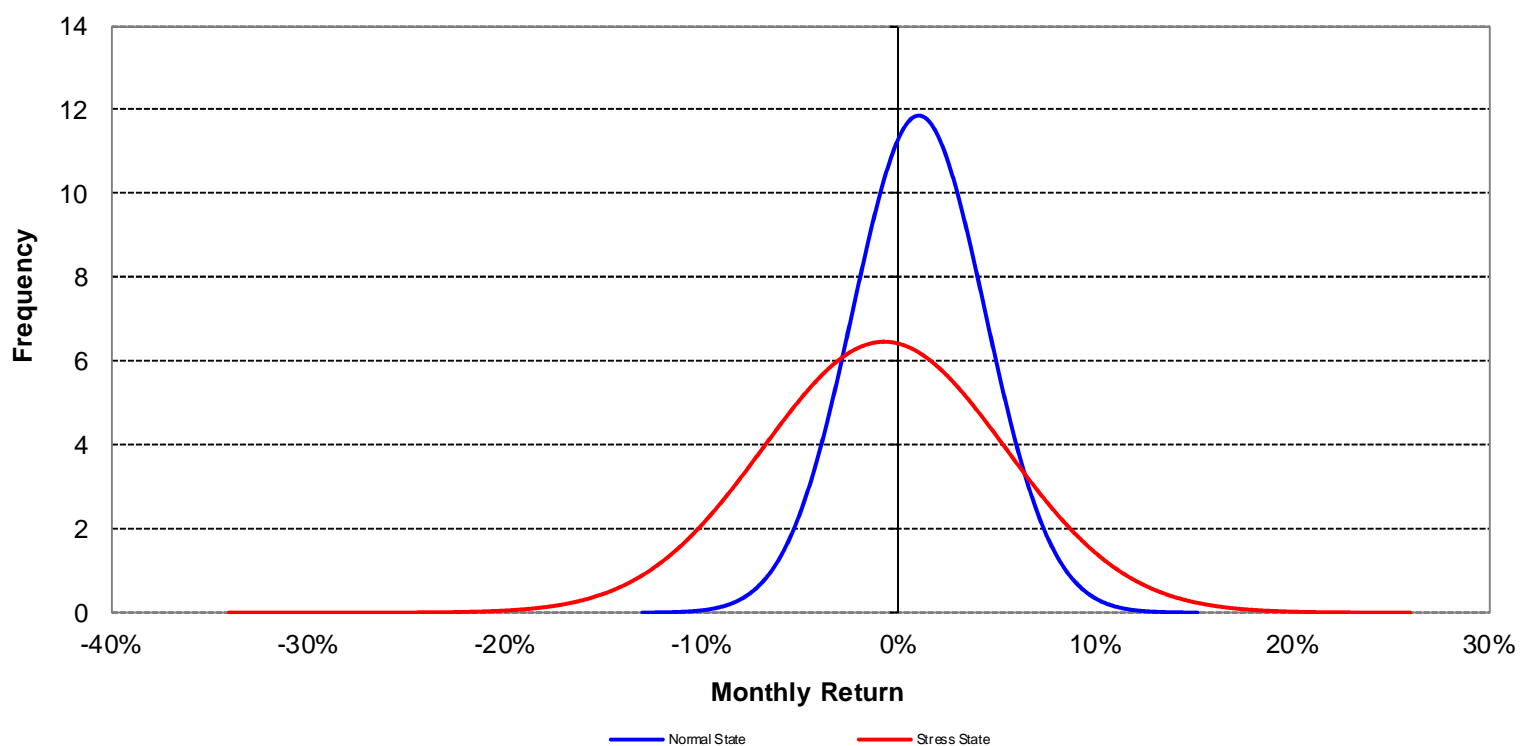


Appendix I: Asset Class Risk/Reward Relationship



Appendix II: Return Distribution by Economic State

Distribution of Monthly Returns for the S&P/TSX by Economic State



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CMO OCTOBER 2015: SUMMARY REPORT

Notable changes

- Equity markets experienced a steep decline during the third quarter. The S&P 500 index fell 6.4%, while the MSCI EAFE index lost 10.2%. Emerging markets stocks were hurt by ongoing macro weakness, dropping 17.9%. As a result of equity market declines during the quarter, expected returns on US stocks rose by 40 to 60 basis points as we now expect a smaller impact due to P/E mean reversion. Expected returns on international developed stocks were mostly unchanged as they still trade within with our fair value range, while expected returns on emerging market stocks rose.
- Treasury yields declined during the third quarter. The outlook for Fed policy and a flight-to-safety from market volatility were the primary drivers. The yield on the 10-year bond fell by 29 bps to 2.06% and the yield on 30-year Treasury fell by 24 bps to 2.87%. As a result of the drop in rates, expected returns on fixed income generally declined. However, expected returns on credit generally rose due to an increase in credit spreads. The OAS on high yields rose by 150 basis points to 6.3%.

- The following table shows some of the relevant metrics taken into account when developing our assumptions.

	Current 9/30/15	Previous 6/30/15	Avg: Trailing 10 Years	Mercer Assumption
3-Month Nominal Yield	0.00	0.01	1.21	3.15
10-Year Nominal Yield	2.06	2.35	3.15	4.20
30-Year Nominal Yield	2.87	3.11	3.91	4.30
10-Year Real Yield	0.65	0.48	1.03	1.75
Long AA Corporate Credit Spread	1.60	1.41	1.41	1.07
Long Investment Grade Corp Credit Spread	2.29	2.02	1.93	1.60
US Large Cap P/E Ratio	19.1	20.3	17.5	17.0
Non-US Devel. Large Cap P/E Ratio	15.8	17.8	15.7	17.0
Emerging Markets P/E Ratio	12.4	14.2	13.8	15.0

* P/E Ratios are MSCI indices using trailing 12 month earnings.

Mean-Variance Assumptions and Factor Scores

Asset Class	Mean-Variance Assumptions							Factor Scores					
	20-Yr Assumptions			Shorter Geometric Returns			Equil Return	Equity				T- Infl	
	GRR	ARR	STD	3-Yr	5-Yr	10Yr		Beta	Dur	Liq	Inc	Costs	Hedg
Domestic Equity													
US All Cap Equity	7.2%	8.8%	18.4%	7.2%	7.2%	7.2%	7.3%	1.00	0.0	93	1.9	30	50
US Large Cap Equity	7.2%	8.7%	18.1%	7.2%	7.2%	7.2%	7.3%	0.96	0.0	95	2.1	25	50
US Mid Cap Equity	7.3%	9.0%	19.6%	7.1%	7.1%	7.1%	7.4%	1.06	0.0	92	1.7	30	50
US Small Cap Equity	7.3%	9.4%	22.1%	6.6%	6.6%	6.6%	7.9%	1.17	0.0	90	1.4	40	50
US Micro Cap Equity	7.7%	10.1%	23.4%	7.2%	7.2%	7.2%	8.3%	1.32	0.0	85	1.4	55	50
US Small/Mid Cap Equity (Smid)	7.3%	9.1%	20.5%	7.0%	7.0%	7.0%	7.6%	1.08	0.0	91	1.4	35	50
US Defensive Equity	7.1%	8.0%	13.7%	7.0%	7.0%	7.0%	7.3%	0.75	0.0	92	2.5	30	50
International Equity													
Non-US Developed All Cap Equity Unhedged	7.5%	9.4%	20.5%	7.5%	7.5%	7.5%	7.5%	1.00	0.0	89	3.0	45	50
Non-US Developed All Cap Equity Hedged	7.4%	9.0%	18.5%	7.4%	7.4%	7.4%	7.5%	1.00	0.0	89	3.0	55	50
Non-US Developed Large Cap Equity Unhedged	7.4%	9.2%	20.3%	7.5%	7.5%	7.5%	7.3%	0.99	0.0	90	3.0	36	50
Non-US Developed Large Cap Equity Hedged	7.3%	8.8%	18.2%	7.3%	7.3%	7.3%	7.3%	0.99	0.0	90	3.0	46	50
Non-US Developed Small Cap Equity Unhedged	7.8%	10.0%	22.4%	7.9%	7.9%	7.9%	7.8%	1.15	0.0	87	2.3	55	50
Non-US Developed Small Cap Equity Hedged	7.8%	9.7%	20.7%	7.7%	7.7%	7.7%	7.8%	1.13	0.0	87	2.3	65	50
Emerging Markets Equity Unhedged	9.6%	12.6%	26.3%	10.9%	10.9%	10.9%	8.4%	1.25	0.0	83	2.6	75	50
AC World ex-US All Cap Equity Unhedged	7.8%	10.0%	22.3%	8.1%	8.1%	8.1%	7.6%	1.06	0.0	88	2.9	85	50
AC World ex-US All Cap Equity Hedged	7.8%	9.4%	19.2%	7.9%	7.9%	7.9%	7.6%	1.06	0.0	88	2.9	95	50
AC World ex-US Large Cap Equity Unhedged	7.8%	9.9%	22.2%	8.0%	8.0%	8.0%	7.5%	1.04	0.0	89	3.1	55	50
AC World ex-US Large Cap Equity Hedged	7.7%	9.3%	19.1%	7.9%	7.9%	7.9%	7.5%	1.04	0.0	89	3.1	65	50
Global AC All Cap Equity Unhedged	7.7%	9.4%	19.5%	7.9%	7.9%	7.9%	7.5%	1.03	0.0	91	2.5	62	50
Global AC All Cap Equity Hedged	7.6%	9.1%	18.3%	7.7%	7.7%	7.7%	7.5%	1.02	0.0	91	2.5	72	50
Global AC Large Cap Equity Unhedged	7.6%	9.3%	19.3%	7.8%	7.8%	7.8%	7.5%	1.00	0.0	92	2.6	55	50
Global AC Large Cap Equity Hedged	7.6%	9.0%	18.0%	7.7%	7.7%	7.7%	7.5%	1.00	0.0	92	2.6	65	50
Global AC Small Cap Equity Unhedged	7.9%	10.0%	21.7%	7.9%	7.9%	7.9%	7.9%	1.17	0.0	88	1.8	75	50
Global AC Small Cap Equity Hedged	7.9%	9.7%	20.5%	7.8%	7.8%	7.8%	7.9%	1.16	0.0	88	1.8	85	50
Global Developed Large Cap Unhedged	7.5%	8.9%	18.0%	7.7%	7.7%	7.7%	7.3%	0.97	0.0	93	2.6	37.5	50
Global Developed Large Cap Hedged	7.5%	8.9%	17.4%	7.7%	7.7%	7.7%	7.3%	0.97	0.0	93	2.6	47.5	50
Global Developed Small Cap Unhedged	7.7%	9.7%	21.1%	7.6%	7.6%	7.6%	7.8%	1.17	0.0	88	1.9	55	50
Global Developed Small Cap Hedged	7.6%	9.5%	20.7%	7.4%	7.4%	7.4%	7.9%	1.17	0.0	88	1.9	65	50
Global Defensive Equity Unhedged	7.5%	8.4%	13.9%	7.7%	7.7%	7.7%	7.3%	0.75	0.0	93	3.1	37.5	50

Mean-Variance Assumptions and Factor Scores

Asset Class	Mean-Variance Assumptions						Factor Scores						
	20-Yr Assumptions						Equil	Equity				T-	Infl
	GRR	ARR	STD	3-Yr	5-Yr	10Yr	Return	Beta	Dur	Liq	Inc	Costs	Hedg
Domestic Fixed Income													
US Govt/Credit FI	3.5%	3.7%	5.9%	1.8%	2.0%	2.5%	4.5%	0.10	6.1	94	2.2	30	20
US Govt/Credit FI (Dow ngrade Tolerant)	3.6%	3.8%	5.9%	1.9%	2.1%	2.6%	4.6%	0.10	6.1	94	2.2	30	20
US Aggregate FI	3.7%	3.8%	5.3%	1.9%	2.1%	2.7%	4.7%	0.10	5.6	93	2.4	35	20
US Short G/C FI	3.4%	3.5%	3.4%	1.2%	1.7%	2.5%	4.3%	0.00	0.5	95	0.3	20	55
US Intermediate G/C FI	3.5%	3.6%	4.9%	1.6%	1.9%	2.6%	4.5%	0.00	3.9	94	1.7	30	40
US Long G/C FI	3.6%	4.5%	14.1%	2.6%	2.3%	2.4%	4.8%	0.10	14.6	95	4.2	25	20
US Long Govt/Credit FI (Dow ngrade Tolerant)	3.9%	4.8%	13.8%	2.8%	2.6%	2.6%	5.0%	0.10	14.6	95	4.2	25	20
US Very Long Govt FI (20+ STRIPS)	2.2%	5.7%	27.9%	0.7%	0.2%	0.0%	4.4%	0.00	26.9	96	0.0	20	10
US Government FI	3.1%	3.3%	6.0%	1.0%	1.4%	2.0%	4.2%	0.00	5.4	99	1.5	10	20
US Credit FI	4.1%	4.4%	7.0%	2.8%	2.9%	3.3%	5.0%	0.20	7.0	90	3.3	50	30
US Credit FI (Dow ngrade Tolerant)	4.3%	4.6%	7.1%	3.0%	3.1%	3.5%	5.2%	0.20	7.0	90	3.3	50	30
US Intermediate Government FI	3.1%	3.2%	4.8%	1.0%	1.4%	2.1%	4.2%	0.00	3.7	99	1.2	10	40
US Long Government FI	2.8%	4.1%	16.5%	1.3%	1.1%	1.2%	4.5%	0.00	16.8	99	3.0	10	10
US Intermediate Credit FI	4.1%	4.2%	4.5%	2.5%	2.8%	3.3%	4.9%	0.20	4.4	89	2.7	50	40
US Long Credit FI	4.1%	5.0%	13.6%	3.4%	3.1%	3.2%	5.0%	0.20	13.3	89	4.9	50	30
US Long Credit FI (Dow ngrade Tolerant)	4.4%	5.3%	13.8%	3.8%	3.5%	3.5%	5.4%	0.20	13.3	89	4.9	50	30
US Mortgage-Backed FI	3.4%	3.5%	4.8%	1.5%	1.6%	2.1%	4.8%	0.00	4.6	88	2.8	60	30
US High Yield FI	6.2%	6.6%	9.7%	6.6%	6.5%	6.3%	6.1%	0.50	4.4	70	6.6	120	60
US Municipal FI	3.3%	3.6%	7.7%	1.3%	1.7%	2.3%	4.5%	0.00	6.7	70	2.3	120	30
US Inflation Indexed FI	3.2%	3.4%	5.4%	1.3%	1.7%	2.3%	4.1%	0.00	8.2	96	2.1	20	85
US Intermediate Inflation Indexed FI	3.2%	3.2%	3.2%	1.1%	1.7%	2.4%	3.9%	0.00	7.5	95	2.0	25	85
US Long Inflation Indexed FI	3.2%	3.4%	6.6%	1.6%	1.9%	2.3%	4.2%	0.00	16.3	95	2.6	25	85
US Senior/Leveraged Loans	6.4%	6.6%	6.8%	5.7%	6.1%	6.3%	6.5%	0.25	0.0	30	4.8	200	80
US Cash	2.6%	2.6%	2.0%	0.9%	1.3%	2.0%	3.2%	0.00	0.0	100	0.0	4	65
International Fixed Income													
Non-US Govt FI Unhedged	2.5%	3.0%	9.9%	0.6%	0.5%	1.0%	4.1%	0.00	8.1	90	0.9	50	40
Non-US Govt FI Hedged	2.6%	2.8%	6.1%	0.5%	0.4%	0.9%	4.4%	0.00	8.1	90	0.9	50	35
Non-US Broad FI Unhedged	2.8%	3.2%	9.8%	0.8%	0.8%	1.3%	4.3%	0.00	7.3	85	1.2	70	40
Non-US Broad FI Hedged	2.8%	3.0%	5.7%	0.7%	0.7%	1.2%	4.6%	0.00	7.3	85	1.2	70	35
Emerging Markets FI - Hard Currency	5.5%	6.1%	10.6%	4.6%	4.7%	5.0%	6.1%	0.35	7.9	75	6.0	100	30
Emerging Markets FI - Local Currency	7.1%	7.6%	10.4%	7.1%	7.1%	7.1%	5.1%	0.50	5.0	75	6.3	125	30
Global Govt FI Unhedged	2.9%	3.2%	7.2%	0.9%	1.1%	1.7%	4.2%	0.00	7.1	85	1.2	70	30
Global Govt FI Hedged	3.0%	3.1%	5.7%	0.8%	1.0%	1.6%	4.4%	0.00	7.1	85	1.2	70	30
Global Broad FI Unhedged	3.2%	3.4%	6.4%	1.2%	1.5%	2.0%	4.4%	0.10	6.5	89	1.8	50	30
Global Broad FI Hedged	3.3%	3.4%	5.2%	1.2%	1.4%	2.0%	4.6%	0.10	6.5	89	1.8	50	30
Global Inflation Indexed FI	2.6%	2.8%	6.0%	0.7%	0.9%	1.5%	3.8%	0.00	8.2	88	4.5	60	78
Global High Yield	6.3%	6.8%	10.4%	6.6%	6.5%	6.4%	6.2%	0.50	4.3	70	6.3	125	50
Miscellaneous													
Convertibles	6.7%	7.1%	9.4%	6.6%	6.5%	6.3%	6.2%	0.50	3.4	70	3.5	120	45
Stable Value/GICs	3.5%	3.5%	3.5%	1.4%	1.8%	2.5%	4.4%	0.00	2.2	95	4.3	25	50
Company Stock - Large Cap	5.4%	8.7%	27.4%	5.9%	5.9%	5.9%	5.0%	0.97	0.0	90	2.1	40	50
Company Stock - Small Cap	2.9%	9.4%	39.7%	2.4%	2.4%	2.4%	3.3%	1.15	0.0	80	1.4	85	50
Global Cash - Currencies	2.5%	2.6%	4.9%	0.9%	1.3%	2.6%	3.2%	0.00	0.1	99	0.7	10	60
Non-US Currency Exposure (UIRP)	0.7%	1.0%	8.0%	0.3%	0.3%	0.3%	1.0%	0.00	0.0	100	0.0	2	50

Mean-Variance Assumptions and Factor Scores

Asset Class	Mean-Variance Assumptions							Factor Scores					
	20-Yr Assumptions			Shorter Geometric Returns			Return	Beta	Dur	Liq	Inc	T-	Infl
	GRR	ARR	STD	3-Yr	5-Yr	10Yr						Costs	Hedg
Alternative Assets ¹													
US Real Estate - Unlevered	6.5%	7.2%	12.5%	6.5%	6.5%	6.5%	6.5%	0.65	0.0	0	3.5	500	60
US Real Estate - Core	6.6%	7.7%	15.6%	6.6%	6.6%	6.6%	6.6%	0.70	0.0	0	4.5	500	60
US Real Estate - Value-Added	7.0%	8.4%	17.3%	7.0%	7.0%	7.0%	7.0%	1.00	0.0	0	4.5	500	60
US Real Estate - Opportunistic	7.4%	9.0%	19.2%	7.4%	7.4%	7.4%	7.4%	1.20	0.0	0	5.5	500	60
US Real Estate - REITS	6.5%	8.5%	21.3%	6.5%	6.5%	6.5%	6.5%	0.75	0.0	90	4.1	50	60
Non-US Real Estate - Private	6.9%	8.4%	18.0%	6.9%	6.9%	6.9%	6.9%	0.75	0.0	0	4.5	500	60
Non-US Real Estate - REITS	6.5%	8.9%	23.0%	6.5%	6.5%	6.5%	6.5%	0.75	0.0	85	3.4	70	60
Global Real Estate - Private	7.2%	8.4%	15.9%	7.2%	7.2%	7.2%	7.2%	0.75	0.0	0	4.5	500	60
Global Real Estate - REITS	6.5%	8.5%	21.2%	6.5%	6.5%	6.5%	6.5%	0.75	0.0	88	3.7	60	60
Timberland	7.4%	8.4%	14.6%	7.4%	7.4%	7.4%	7.4%	0.50	0.0	0	4.5	500	60
Distressed Debt	9.8%	10.7%	14.2%	9.8%	9.8%	9.8%	9.8%	0.85	3.2	30	6.6	350	50
Private Equity - Total	10.3%	13.3%	26.9%	10.3%	10.3%	10.3%	10.3%	1.40	0.0	0	0.2	500	50
Private Equity - LBO	10.2%	13.8%	29.2%	10.2%	10.2%	10.2%	10.2%	1.40	0.0	0	0.2	500	50
Private Equity - Venture Cap	10.9%	14.7%	30.4%	10.9%	10.9%	10.9%	10.9%	1.65	0.0	0	0.2	500	50
Private Equity - Mezzanine	9.2%	10.8%	19.1%	9.2%	9.2%	9.2%	9.2%	0.95	0.0	0	0.2	500	50
Private Equity - Special Situations	10.7%	14.2%	28.9%	10.7%	10.7%	10.7%	10.7%	1.15	0.0	0	0.2	500	50
Infrastructure - Listed	6.5%	7.6%	15.2%	6.5%	6.5%	6.5%	6.5%	1.10	0.0	0	1.0	500	50
Infrastructure -Private	9.5%	11.0%	18.1%	9.5%	9.5%	9.5%	9.5%	0.90	0.0	90	3.5	50	50
Hedge Funds - Zero Beta	4.0%	4.1%	3.6%	4.0%	4.0%	4.0%	4.0%	0.00	0.0	50	0.0	300	50
Hedge Funds - Conservative	5.6%	5.8%	5.9%	5.6%	5.6%	5.6%	5.6%	0.18	0.0	40	0.0	400	50
Hedge Funds - Moderate	6.7%	7.0%	8.0%	6.7%	6.7%	6.7%	6.7%	0.30	0.0	40	0.0	400	50
Hedge Funds - Mod/Aggressive	7.7%	8.2%	10.5%	7.7%	7.7%	7.7%	7.7%	0.42	0.0	40	0.0	400	50
Hedge Funds - Aggressive	8.4%	9.1%	12.8%	8.4%	8.4%	8.4%	8.4%	0.59	0.0	40	0.0	400	50
Hedge Funds - Macro	7.7%	8.4%	12.1%	7.7%	7.7%	7.7%	7.7%	0.00	0.0	50	0.0	100	50
Commodities - Long Only	4.2%	5.6%	17.3%	4.2%	4.2%	4.2%	4.2%	0.00	0.0	90	0.0	50	80
Natural Resources - Listed	7.0%	9.3%	22.8%	7.0%	7.0%	7.0%	7.1%	0.90	0.0	90	2.7	25	65
Natural Resources- Private	9.6%	12.0%	23.4%	9.6%	9.6%	9.6%	9.6%	0.90	0.0	90	2.7	25	65
Gold	3.9%	5.2%	16.6%	3.9%	3.9%	3.9%	3.9%	0.00	0.0	92	0.0	50	80
Economic Variables													
Inflation	2.2%	2.2%	1.7%	2.0%	2.1%	2.2%	2.2%						
Real GDP Growth	2.4%	2.4%	1.9%	2.1%	2.3%	2.4%	2.4%						
Nominal GDP	4.6%	4.6%	2.3%	4.1%	4.4%	4.6%	4.6%						
Total Comp-PC ²	5.1%	5.3%	1.6%	4.5%	4.7%	4.8%	4.6%						
Wage/Salary-PC ²	4.0%	4.0%	1.9%	3.8%	3.9%	4.0%	4.1%						
Medical Costs-PC ²	5.7%	5.7%	1.7%	6.8%	6.5%	6.3%	4.6%						
Housing Appreciation	3.7%	4.0%	8.5%	3.7%	3.7%	3.7%	3.7%						
Corporate Profits/Earnings	4.6%	5.2%	10.5%	4.6%	4.6%	4.6%	4.6%						

1 Net of Alpha, Tracking Error, and Fees.

2 Per capita basis.

3 Factor scores include Equity Beta (measured relative to the DJ/Wilshire 5000), Duration, Liquidity, Income, Transaction Costs, and Inflation Hedge. Transaction costs are measured in bps.

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Mean-Variance Assumptions (Real Terms)

				Real Terms (Annual)							
Asset Class	GRR	ARR	STD	Asset Class	GRR	ARR	STD	Asset Class	GRR	ARR	STD
Domestic Equity				US Short G/C FI	1.2%	1.3%	3.4%	Miscellaneous			
US All Cap Equity	5.0%	6.6%	18.4%	US Intermediate G/C FI	1.3%	1.4%	4.9%	Convertibles	4.5%	4.9%	9.4%
US Large Cap Equity	5.0%	6.5%	18.1%	US Long G/C FI	1.4%	2.3%	14.1%	Stable Value/GICs	1.3%	1.3%	3.5%
US Mid Cap Equity	5.1%	6.8%	19.6%	US Govt/Credit FI (Dow ngrade Tolerant)	1.7%	2.6%	13.8%	Company Stock - Large Cap	3.2%	6.5%	27.4%
US Small Cap Equity	5.0%	7.2%	22.1%	US Very Long Govt FI (20+ STRIPS)	-0.1%	3.5%	27.9%	Company Stock - Small Cap	0.6%	7.2%	39.7%
US Micro Cap Equity	5.5%	7.9%	23.4%	US Government FI	0.9%	1.1%	6.0%	Global Cash - Currencies	0.3%	0.4%	4.9%
US Small/Mid Cap Equity (Smid)	5.0%	6.9%	20.5%	US Credit FI	1.9%	2.2%	7.0%	Non-US Currency Exposure (UIRP)	-1.5%	-1.2%	8.0%
US Defensive Equity	4.9%	5.8%	13.7%	US Credit FI (Dow ngrade Tolerant)	2.1%	2.4%	7.1%	Alternative Assets1			
International Equity				US Intermediate Government FI	0.9%	1.0%	4.8%	US Real Estate - Unlevered	4.3%	5.0%	12.5%
Non-US Developed All Cap Equity Unhedged	5.3%	7.2%	20.5%	US Long Government FI	0.6%	1.9%	16.5%	US Real Estate - Core	4.4%	5.5%	15.6%
Non-US Developed All Cap Equity Hedged	5.2%	6.8%	18.5%	US Intermediate Credit FI	1.9%	2.0%	4.5%	US Real Estate - Value-Added	4.8%	6.2%	17.3%
Non-US Developed Large Cap Equity Unhedged	5.2%	7.0%	20.3%	US Long Credit FI	1.9%	2.8%	13.6%	US Real Estate - Opportunistic	5.1%	6.8%	19.2%
Non-US Developed Large Cap Equity Hedged	5.1%	6.6%	18.2%	US Long Credit FI (Dow ngrade Tolerant)	2.2%	3.1%	13.8%	US Real Estate - REITS	4.3%	6.3%	21.3%
Non-US Developed Small Cap Equity Unhedged	5.6%	7.8%	22.4%	US Mortgage-Backed FI	1.2%	1.3%	4.8%	Non-US Real Estate - Private	4.7%	6.2%	18.0%
Non-US Developed Small Cap Equity Hedged	5.6%	7.5%	20.7%	US High Yield FI	4.0%	4.4%	9.7%	Non-US Real Estate - REITS	4.2%	6.7%	23.0%
Emerging Markets Equity Unhedged	7.4%	10.4%	26.3%	US Municipal FI	1.1%	1.4%	7.7%	Global Real Estate - Private	5.0%	6.2%	15.9%
AC World ex-US All Cap Equity Unhedged	5.6%	7.8%	22.3%	US Inflation Indexed FI	1.0%	1.2%	5.4%	Global Real Estate - REITS	4.3%	6.3%	21.2%
AC World ex-US All Cap Equity Hedged	5.5%	7.2%	19.2%	US Intermediate Inflation Indexed FI	1.0%	1.0%	3.2%	Timberland	5.2%	6.2%	14.6%
AC World ex-US Large Cap Equity Unhedged	5.5%	7.7%	22.2%	US Long Inflation Indexed FI	1.0%	1.2%	6.6%	Distressed Debt	7.6%	8.5%	14.2%
AC World ex-US Large Cap Equity Hedged	5.4%	7.1%	19.1%	US Senior/Leveraged Loans	4.2%	4.4%	6.8%	Private Equity - Total	8.0%	11.1%	26.9%
Global AC All Cap Equity Unhedged	5.5%	7.2%	19.5%	US Cash	0.4%	0.4%	2.0%	Private Equity - LBO	8.0%	11.6%	29.2%
Global AC All Cap Equity Hedged	5.4%	6.9%	18.3%	International Fixed Income				Private Equity - Venture Cap	8.6%	12.5%	30.4%
Global AC Large Cap Equity Unhedged	5.4%	7.1%	19.3%	Non-US Govt FI Unhedged	0.3%	0.8%	9.9%	Private Equity - Mezzanine	7.0%	8.6%	19.1%
Global AC Large Cap Equity Hedged	5.3%	6.8%	18.0%	Non-US Govt FI Hedged	0.4%	0.6%	6.1%	Private Equity - Special Situations	8.4%	12.0%	28.9%
Global AC Small Cap Equity Unhedged	5.7%	7.8%	21.7%	Non-US Broad FI Unhedged	0.5%	1.0%	9.8%	Infrastructure - Listed	4.3%	5.4%	15.2%
Global AC Small Cap Equity Hedged	5.6%	7.5%	20.5%	Non-US Broad FI Hedged	0.6%	0.8%	5.7%	Infrastructure - Private	7.3%	8.8%	18.1%
Global Developed Large Cap Unhedged	5.3%	6.7%	18.0%	Emerging Markets FI - Hard Currency	3.3%	3.9%	10.6%	Hedge Funds - Zero Beta	1.8%	1.9%	3.6%
Global Developed Large Cap Hedged	5.3%	6.7%	17.4%	Emerging Markets FI - Local Currency	4.9%	5.4%	10.4%	Hedge Funds - Conservative	3.4%	3.6%	5.9%
Global Developed Small Cap Unhedged	5.5%	7.5%	21.1%	Global Govt FI Unhedged	0.7%	1.0%	7.2%	Hedge Funds - Moderate	4.5%	4.8%	8.0%
Global Developed Small Cap Hedged	5.4%	7.3%	20.7%	Global Govt FI Hedged	0.8%	0.9%	5.7%	Hedge Funds - Mod/Aggressive	5.5%	6.0%	10.5%
Global Defensive Equity Unhedged	5.3%	6.2%	13.9%	Global Broad FI Unhedged	1.0%	1.2%	6.4%	Hedge Funds - Aggressive	6.1%	6.9%	12.8%
Domestic Fixed Income				Global Broad FI Hedged	1.1%	1.2%	5.2%	Hedge Funds - Macro	5.5%	6.2%	12.1%
US Govt/Credit FI	1.3%	1.5%	5.9%	Global Inflation Indexed FI	0.4%	0.6%	6.0%	Commodities - Long Only	2.0%	3.4%	17.3%
US Govt/Credit FI (Dow ngrade Tolerant)	1.4%	1.6%	5.9%	Global High Yield	4.1%	4.6%	10.4%	Natural Resources - Listed	4.7%	7.1%	22.8%
US Aggregate FI	1.5%	1.6%	5.3%					Natural Resources - Private	7.4%	9.8%	23.4%

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