Omega Engineering LLC and Mr. Oscar Rivera
Claimants
v.
The Republic of Panama
Respondent

ICSID Case No. ARB/16/42

# Direct Testimony of

# Dr. Daniel Flores and Mr. Ryan McCann

28 February 2020

QUADRANT Economics

# OVERVIEW

1. Potential New Contracts Claim

2. Existing Contracts Claim

3. Applicable Rate of Interest

# Potential New Contracts Claim

1

# THE VALUE OF OMEGA PANAMA

- Compass Lexecon estimates "the value of Claimants' interest in Omega Panama." It states:

  "The Measures, however, impeded Omega Panama from continuing as a going concern, reducing its value to zero. To assess these losses suffered by Claimants, we apply a fair market value principle."

- The American Society of Appraisers defines the FMV as:

> …the price, expressed in terms of cash equivalents, at which property would change hands between a hypothetical willing and able buyer and a hypothetical and able seller, acting at arm's length in an open and unrestricted market, when neither is under compulsion to buy or sell and when both have reasonable knowledge of the relevant facts.[7]

- The relevant economic question is thus:

  What is the FMV of Omega Panama as of 23 December 2014 but for the Measures?

First CL Report, ¶¶ 12, 59-61, 83; First QE Report, ¶¶ 11, 16.

# OMEGA PANAMA HAD MINIMAL STAFF AND ASSETS

OMEGA ENGINEERING, INC.

Statements of Income and Stockholder's Equity
For the years ended December 31, 2013 and 2012
(In U.S. Dollars)

| | Notes | 2013 | 2012 |
|---|---|---|---|
| Contracts revenue | 7 | 29,862,641 | 13,924,209 |
| Income from operations | | 29,862,641 | 13,924,209 |
| Contracts cost | | 26,622,812 | 12,356,349 |
| Gross profit | | 3,239,829 | 1,567,860 |

## 18.- General and administrative expenses

| | 2013 |
|---|---|
| Salaries | 107,694 |

| | Notes | 2013 | 2012 |
|---|---|---|---|
| Income tax | 13 & 14 | 530,301 | 252,269 |
| Net earnings | | 1,684,103 | 522,902 |
| Stockholder's equity at beginning of year | | 707,794 | 96,679 |
| Unrealized (loss) gain in marketable securities available for sale | 4 | (101,507) | 88,213 |
| Prepaid dividend tax | | (30,272) | - |
| Stockholder's equity at end of year | | 2,260,118 | 707,794 |

OMEGA ENGINEERING, INC.

Balance Sheets
December 31, 2013 and 2012
(In U.S. Dollars)

| | Notes | 2013 | 2012 |
|---|---|---|---|
| ASSETS | | | |
| Current assets: | | | |
| Cash and cash equivalents | 3 | 6,419,535 | 637,655 |
| Negotiable securities | | 102,038 | - |

## 6.- Equipments, net

| | Balance at December 31, 2013 |
|---|---|
| Cost: | |
| Office equipment | 15,894 |
| Computer equipment | 40,652 |
| Motor Vehicles | 296,994 |
| | 353,541 |
| Less: Accumulated depreciation | (138,722) |
| Net costs | 214,818 |

| | | |
|---|---|---|
| Total liabilities and equity | 22,934,959 | 9,642,702 |

# OMEGA PANAMA DID NOT HAVE A PROVEN RECORD



- Omega Panama was incorporated in October 2009
- As of the Valuation Date in December 2014, Omega Panama:
  - had won just 9 contracts (plus one cancelled), but only when bidding in a consortium with Omega US
  - had only completed one contract
  - had an average progress to completion of about 40%
  - had no success in the private sector

| Project | Project Progress (McKinnon Report) |
|---|---|
| MINSA CAPSI Rio Sereno | 62.0% |
| MINSA CAPSI Kuna Yala | 48.0% |
| MINSA CAPSI Puerto Caimito | 83.0% |
| Mercado Público Colón | 1.0% |
| Aeropuerto Internacional Tocumen | 100.0% |
| Ciudad de las Artes | 37.0% |
| Unidad Judicial La Chorrera | 54.0% |
| Palacio Municipal Colón | 3.0% |
| Mercados Periféricos | 58.0% |
| **Average** | **40.6%** |

First QE Report ¶¶ 27-28, Figure 2; Second QE Report, ¶28.

# OMEGA PANAMA DID NOT STAND OUT AMONGST ITS COMPETITORS

| Company | Operating Since | Presence (countries) | 2014 Revenues (billions) |
|---|---|---|---|
| Actividades de Construcción y Servicios, S.A. | 1997 | 50 | € 34.9 |
| Elecnor S.A. | 1958 | 40 | € 1.7 |
| Comsa EMTE S.L. | + 120 years | 25 | € 1.4 |
| Acciona S.A. | 1960 | 40 | US$ 2.1 |
| FCC Group | 1905 | 21 | US$ 1.7 |
| SACYR Group | 1986 | 11 | US$ 0.9 |
| Constructura Meco, S.A. | 1978 | 5 | US$ 0.3 |
| IBT Group | 1999 | 30 | US$ 0.2 |
| Grupo San José | 1979 | 20 | US$ 0.2 |
| **Omega Panama** | **2009** | **1** | **US$ 0.02** |

First QE Report, ¶ 38; Second QE Report, ¶ 56; **C-0017**, p. 5; **C-0138**, tab "Earnings."

# THE FMV OF OMEGA PANAMA CANNOT INCLUDE ASSETS THAT IT DOES POSSESS



- There is no exclusive right to public works contracts in Panama – any qualified company can bid for public contracts
- Omega Panama had no special competitive advantage, no valuable tangible or intangible assets (such as a recognized brand name)
- Omega Panama bid without a partner on at least 10 occasions – it won <u>none</u> of those bids
- The financial capacity and experience on which Omega Panama relied to win 10 bids <u>do not pertain</u> to Omega Panama, but to other companies
  - A willing buyer would not pay for assets (financial capacity and experience) that Omega Panama did not possess
- No willing buyer looking to start an operation in public works sector in Panama would have found any compelling reason to pay anything to acquire Omega Panama
- Hence, the FMV of Omega Panama is zero

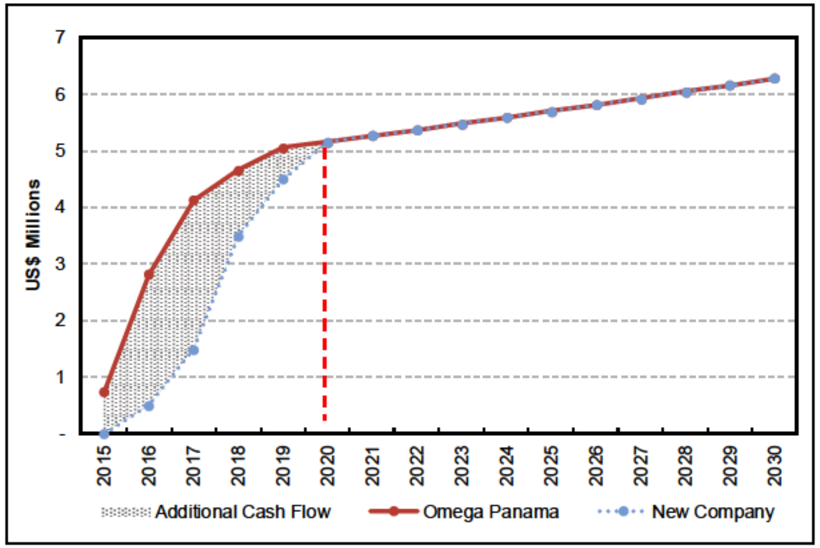
Second QE Report, ¶¶ 19-80.

# NO WILLING BUYER WOULD VALUE OMEGA PANAMA ON THE BASIS OF CASH FLOWS FROM NEW CONTRACTS IN PERPETUITY

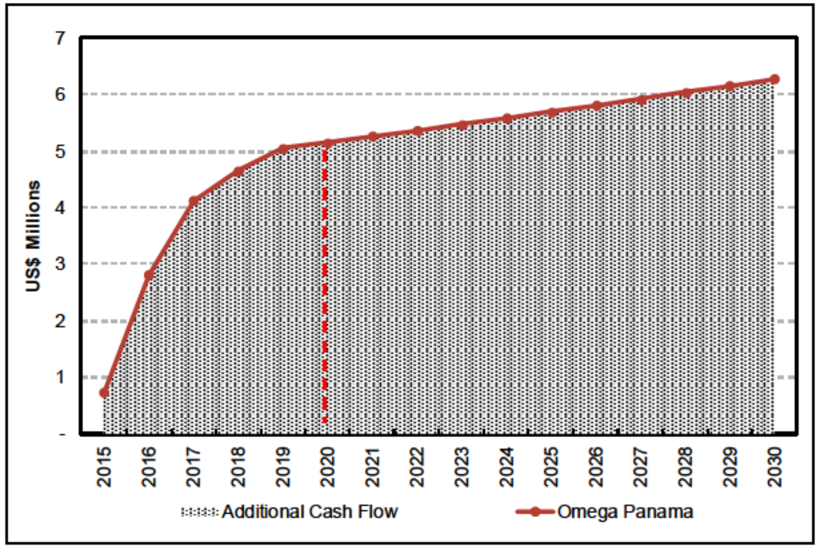


- A willing buyer wanting to bid for new public works contracts in Panama would not need to buy Omega Panama, because it could bid on its own
- To the extent that local know-how were needed, it could be gained during an initial ramp-up period
- The value of Omega Panama would not extend beyond that initial ramp-up period
- The inclusion of cash flows in perpetuity in an FMV estimate is contrary to how a willing buyer would value Omega Panama

**WILLING BUYER'S VIEW**




**INCORRECT VIEW**

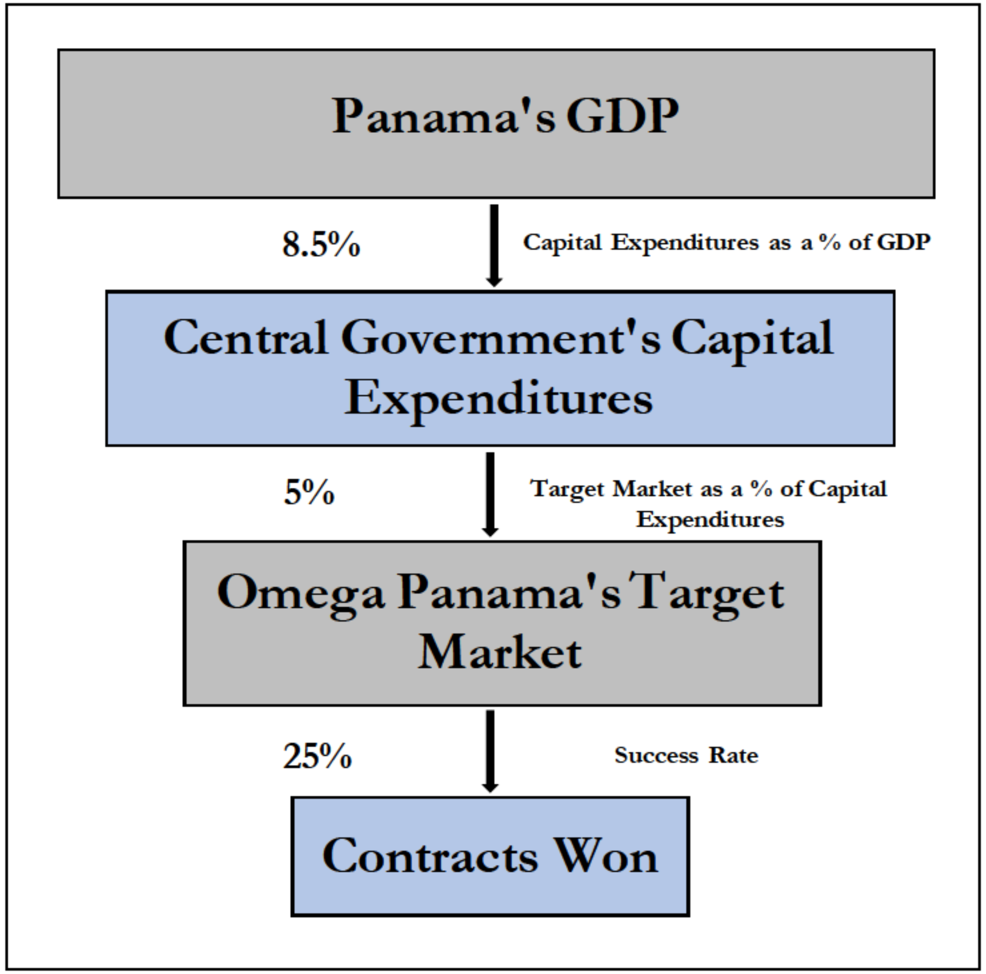



Second QE Report, ¶¶ 39-43, Figure 2 and Figure 3.

# PROJECTING OMEGA PANAMA'S FUTURE CASH FLOWS IS A HIGHLY SPECULATIVE EXERCISE



- Projecting Omega Panama's future cash flows is a highly speculative exercise
- That exercise requires making estimations based on a limited and volatile track record

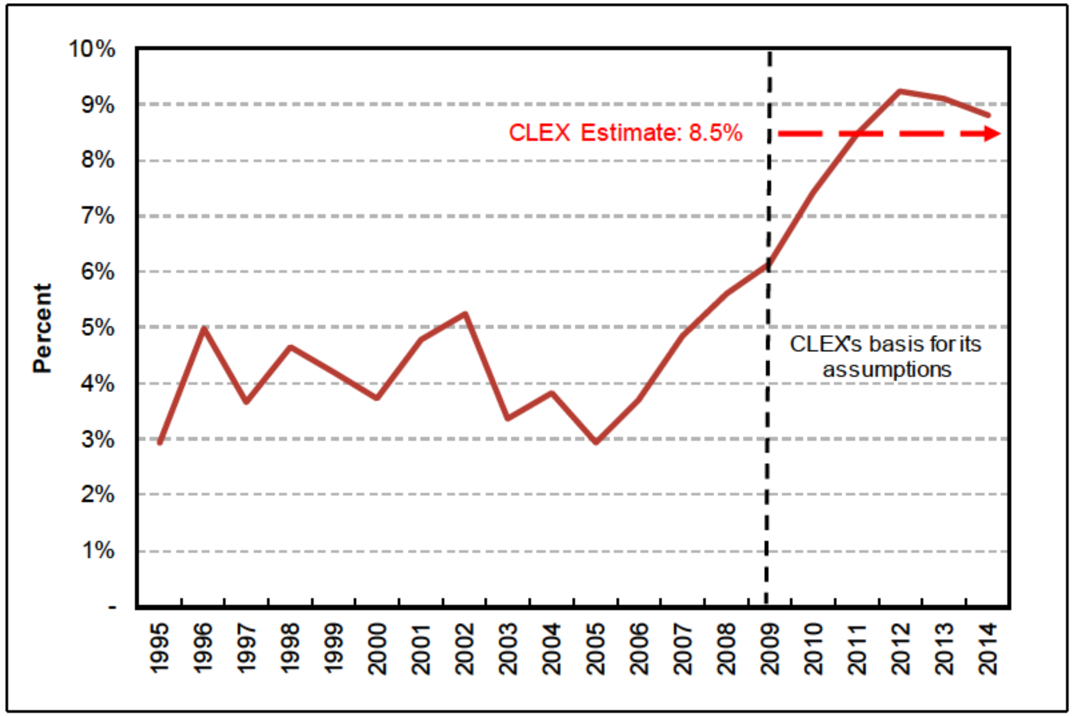



First QE Report, Figure 4; Second QE Report, ¶¶ 86-143.

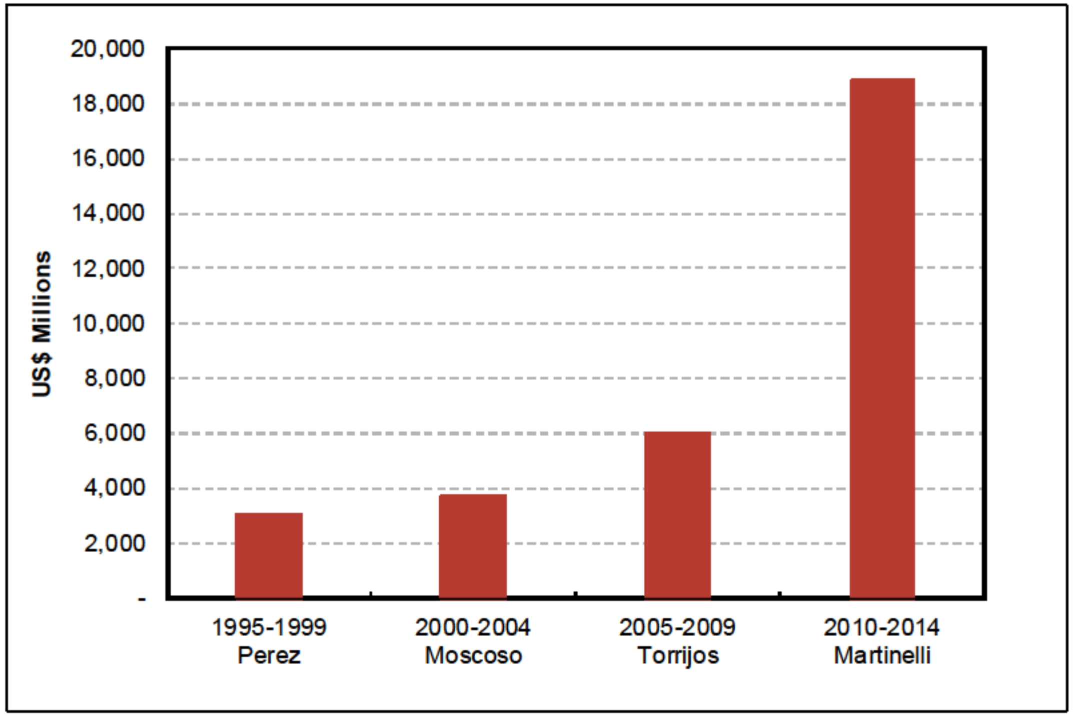
# PROJECTING FUTURE PUBLIC SPENDING

- A DCF projection requires estimating the portion of public spending that would be available to the types of projects on which Omega Panama would have bid
- A hypothetical buyer of Omega Panama would not have projected the future based on a recent short period of very high public spending (2009-2014); it would have projected based on expectations as of the Valuation Date

**Public Capital Expenditures as a % of GDP**




**Public Capital Expenditures by Administration**




First QE Report, Figures 5, 6; Second QE Report, ¶¶ 90-99, Figure 10.

- Between 2009-2014 public sector debt increased by 66%
- During the 2014 presidential campaign there was a clear recognition of the need to reign in spending

**La Prensa**

HOY: Ricardo Ma

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“Ya con lo que está sucediendo [en el Canal] queda clara la necesidad de un Gobierno honesto” que mantenga “la disciplina fiscal” y de prioridad al gasto social responsable, todos planteamientos de su campaña, afirmó Varela en una entrevista con **TVN Noticias**.

## Nuevo Gobierno obligado a disciplina fiscal por crisis en Canal, dice Varela

El vicepresidente y candidato presidencial opositor, Juan Carlos Varela, afirmó que el conflicto en la ampliación del Canal de Panamá obligará al nuevo Gobierno que será elegido en mayo próximo a mantener la disciplina fiscal.

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"Already with what is happening [in the Canal] there is a clear need for an honest government" that maintains "fiscal discipline" and that prioritizes responsible social spending, all approaches of his campaign, said Varela in an interview with TVN News.

First QE Report, ¶¶ 62-63; QE-0026, p. 2.

# FUTURE PUBLIC SPENDING MUST BE PROJECTED BASED ON CONTEMPORANEOUS EXPECTATIONS

Panamá América REGISTRO | INICIAR SESIÓN

ACTUALIDAD OPINIÓN ECONOMÍA VARIEDADES DEPORTES TECNOLOGÍA MULTIMEDIA IMPRESO JMJ 2019 MUJER 5ongo

## Nuevo gobierno panameño obligado a disciplina fiscal para alentar crecimiento

Economistas panameños alertan de que el próximo Gobierno no podrá "endeudarse tanto" como el saliente y deberá reajustar su gasto para satisfacer las reivindicaciones sociales del país. Panamá ha tenido en la última década un crecimiento promedio de 8,3 % del producto interno bruto (PIB), el doble del registrado en Latinoamérica y el Caribe.

**Panamá/EFE** - *Actualizado: 30/4/14 - 08:03 am*

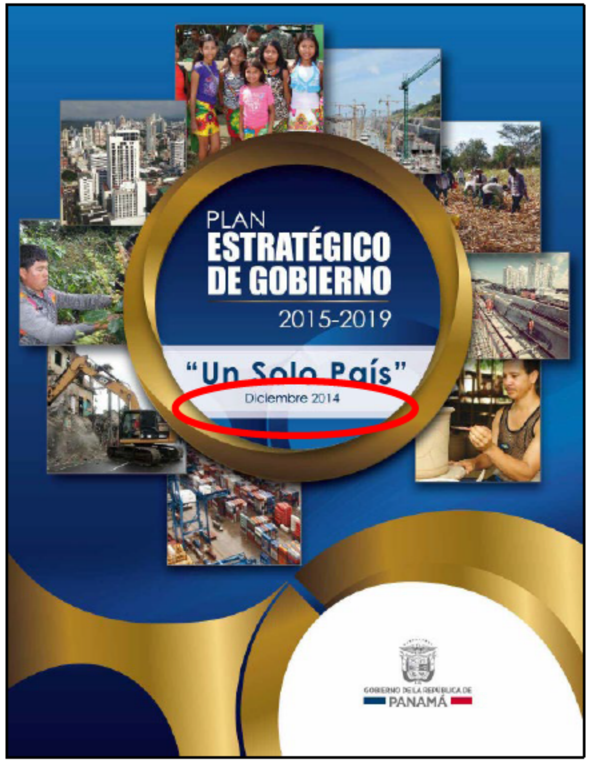
In this context, "the first thing that the next government must do is recapture fiscal discipline, in such a way that the level of revenues and debt are in line with the ability to pay that debt," said Moreira.

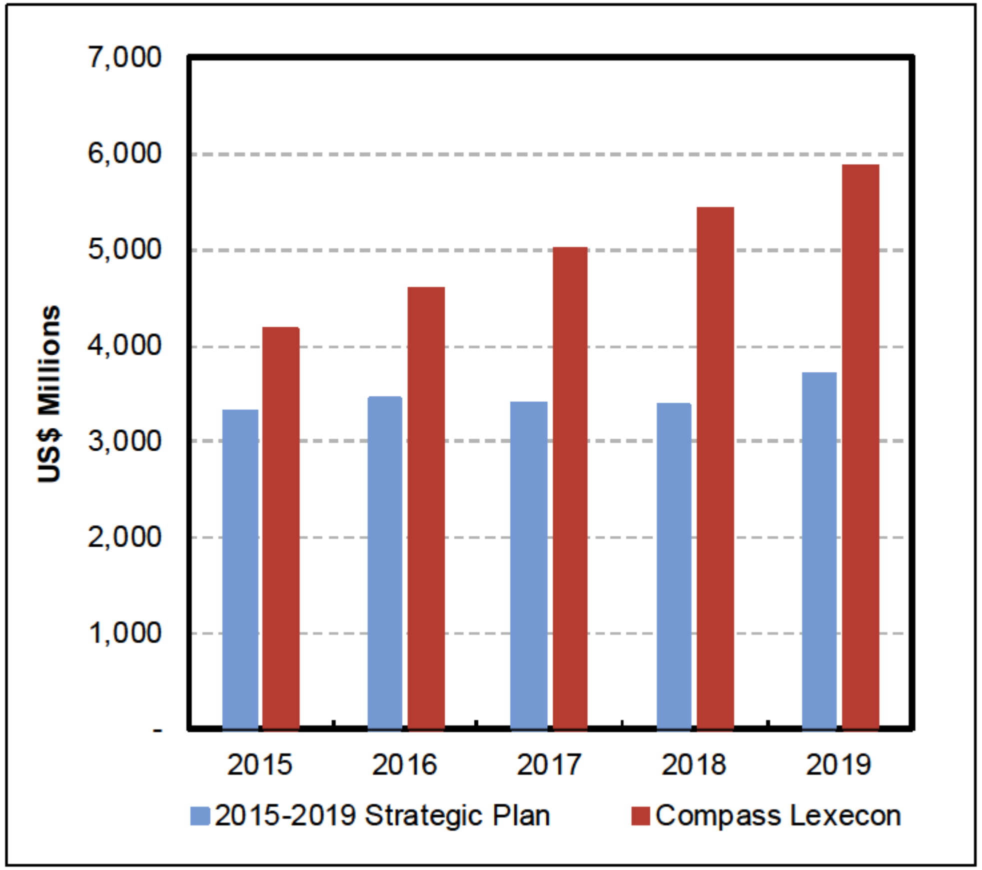
En ese contexto, "lo primero que tendrá que hacer el próximo gobierno es recuperar la disciplina fiscal, de manera que el nivel de ingresos y endeudamiento esté acorde con la capacidad real de pago de esa deuda", dijo Moreira.

First QE Report, ¶ 62; **QE-0025**, p. 2.

# FUTURE PUBLIC SPENDING MUST BE PROJECTED BASED ON CONTEMPORANEOUS EXPECTATIONS

- After government elections are held, incoming administrations must present a strategic five-year fiscal plan
- The new Varela Administration Strategic Plan confirmed that public spending would not follow the trend of the previous Martinelli Administration



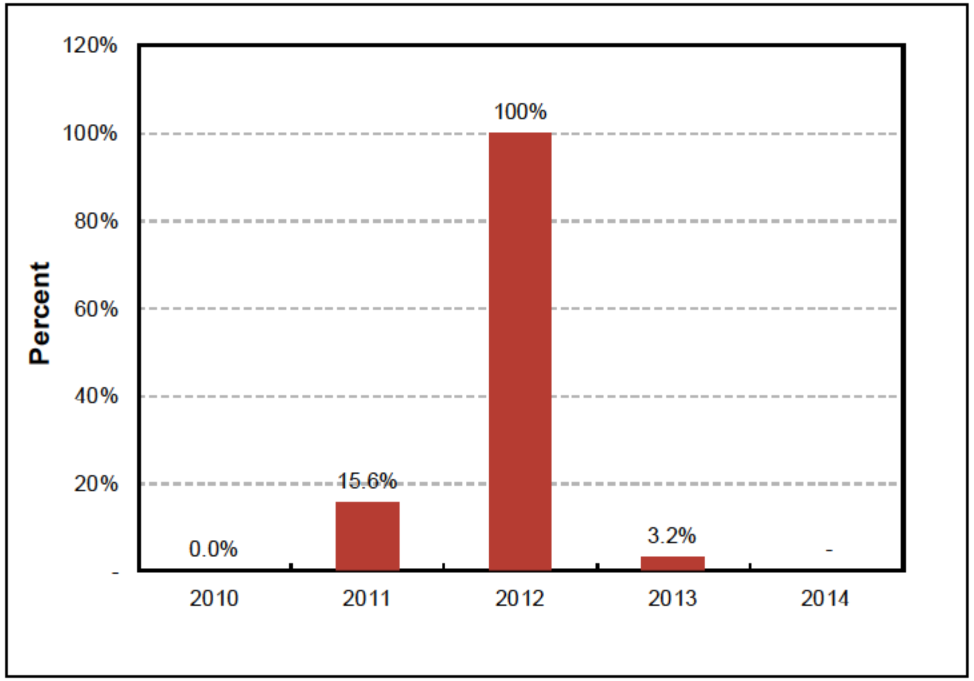




First QE Report, Figure 8; Second QE Report, n. 142; **QE-0027**.

# OMEGA PANAMA'S FUTURE SUCCESS RATE CANNOT BE PROJECTED WITH REASONABLE CERTAINTY



- As the World Bank Guidelines indicate, a going concern (the subject of a DCF analysis) must be "in operation for a sufficient period of time to generate the data required for the calculation of future income and which could have been expected with reasonable certainty."
- A sufficient operational history is required to make assumptions about future performance
- Omega Panama lacked such an operational history




| | 2010 | 2011 | 2012 | 2013 | 2014 |
|---|---|---|---|---|---|
| Bids Tendered (US$ millions) | 176 | 337 | 87 | 61 | - |
| Bids Won (US$ millions) | - | 53 | 87 | 2 | - |
| **Success Rate** | **0.0%** | **15.6%** | **100%** | **3.2%** | **-** |
| Bids Tendered | 14 | 21 | 3 | 4 | - |
| Bids Won | - | 6 | 3 | 1 | - |

First QE Report, ¶¶ 69-70, Figures 9, 10; First CL Report, Figure VI.

# OTHER NECESSARY COMPONENTS OF THE CASH FLOW PROJECTION CANNOT BE PROJECTED WITH REASONABLE CERTAINTY EITHER



- Profit margin
  - Profit margins cannot be based on unproven aspirational profitability models
  - Recall that Omega Panama had completed only one project as of the Valuation Date
- General expenses
  - General expenses should be projected in a consistent manner
- Timing of cash flows
  - Assuming that Omega Panama would complete projects in 18 months is inconsistent with the historical record, which indicates about 30 months

Second QE Report, ¶¶ 127-143.

# PROJECTED CASH FLOWS MUST BE DISCOUNTED USING A DISCOUNT RATE THAT REFLECTS THE RISKS FACED BY OMEGA PANAMA



- If a DCF valuation were conceptually justified and were based on a sufficient operating history to lead to reliable results, the projected cash flows would need to be discounted using a discount rate

- The discount rate represents the minimum rate of return that investors require to invest in a company, instead of other assets

- In this case, the discount rate must adequately reflect the risks faced by a small privately-held general contractor in Panama

- An appropriate discount rate would be in the range of 18% to 23%

First QE Report, Figure 14; Second QE Report ¶¶ 81-84, Figure 8.

# THE FMV OF OMEGA PANAMA IS ZERO



- Assuming the existence of a buyer willing to acquire Omega Panama, the FMV based on a DCF analysis (if such method were appropriate) would be *de minimis*
- Given that there would not have been such a buyer, the FMV of Omega Panama is zero

| | Impact of Correction (US$ millions) | Cumulative Damages (US$ millions) |
|---|---|---|
| Compass Lexecon | | 42.5 |
| **Corrections** | | |
| Remove Perpetuity Cash Flows | (30.7) | 11.8 |
| Capital Expenditures per Govt. Forecast | (4.2) | 7.5 |
| Success Rate (9.4%) | (4.5) | 3.0 |
| Gross Margin [redacted] | (0.7) | 2.3 |
| Correction to General Expenses | (0.4) | 2.0 |
| Timing of Cash Flows (30 Months) | (0.4) | 1.5 |
| Discount Rate (Midpoint) | (0.4) | 1.1 |

Second QE Report, Figure 14.

# Existing Contracts Claim

# 2

# EXISTING CONTRACTS CLAIM



- The Existing Contracts Claim is related to eight projects that were ongoing as of the Valuation Date
  - Unpaid Invoices: + US$ 20 million
  - Expected Future Profits on work not yet completed: + US$ 2 million
  - Advance Payments: − US$ 14 million

- The total requested by Claimants before applying any interest (on past amounts) or discounting (on future amounts) is about US$ 8 million

- After applying interest and discounting, the totals as of the Valuation Date are:
  - Compass Lexecon: US$ 8.7 million
  - Quadrant: US$ 3.8 million

- The reasons for this difference arise from:
  - Interest rate applicable to Unpaid Invoices
  - Assessment of the present value of Advance Payments
  - Amounts in question

C-0438, tab "Summary"; Second CL Report, Table II; Second QE Report, ¶¶ 149-174.

# ASSESSMENT OF THE PRESENT VALUE OF ADVANCE PAYMENTS



- Compass Lexecon discounts Advance Payments as though they were to be received in the future
- We acknowledge they had already been received as of the Valuation Date
- Using the value of Advance Payments as of the Valuation Date reduces the amount requested by Claimants by US$ 1 million, all else equal

| Unpaid Invoices (US$ millions) | Advance Payments (US$ millions) | Expected Future Profits (US$ millions) |
|---|---|---|
| 20 | [redacted] | 2 |

Second QE Report, ¶ 156-160, Figure 16; Second CL Report, ¶¶ 30-35.

# AMOUNTS IN QUESTION

- Compass Lexecon's calculations assume that Omega Panama would perform work relating to a power line as part of the Kuna Yala project
  - However, the evidence shows that a decision to award that work to Omega Panama had not been made as of the Valuation Date
  - Removing this work reduces the amount requested by Claimants by US$ 0.5 million, all else equal
- Certain amounts claimed as part of the Expected Future Profits relate to four addenda that lacked the Comptroller's endorsement. These addenda include No. 4 for Rio Sereno, No. 3 and No. 4 for Kuna Yala, and No. 4 for Puerto Caimito
  - We are instructed that these addenda should not be included in the calculation of the existing contracts claim
  - Removing these addenda reduces the amount requested by Claimants by US$ 3.2 million, all else equal

Second QE Report, ¶¶ 164-172.

- Summary of cumulative corrections to the Existing Contracts Claim:

| | Impact of Correction* (US$ millions) | Cumulative Damages (US$ millions) |
|---|---|---|
| Compass Lexecon | | 8.7 |
| **Corrections** | | |
| Nominal Value of Advances | (1.0) | 7.7 |
| Kuna Yala Power Line Work | (0.5) | 7.2 |
| Unendorsed Addenda | (2.7) | 4.5 |
| Discounting and Interest | (0.7) | 3.8 |

*Amounts include interaction effects and may differ from amounts shown in slides 21 and 22, which do not include interaction effects

Second QE Report, Figure 16.

# Interest Rate

# 3

# THE YIELD OF THE 6-MONTH OR 1-YEAR U.S. TREASURY BILLS IS A REASONABLE COMMERCIAL RATE OF INTEREST

- From an economic perspective, interest must compensate a successful claimant for the time elapsed between the Valuation Date and the payment of a damages award.
- Fisher and Romaine:

> 146 JOURNAL OF ACCOUNTING, AUDITING & FINANCE
>
> **2. The Rate of Prejudgment Interest**[3]
>
> We begin with a simple case. The violation took place at a single point of time, time 0. It involved the destruction of an asset whose value at that time is clearly known as Y. Hence, had damages been assessed at time 0, an award of Y would have made the plaintiff whole. Unfortunately, however, the processes of justice take time, and the award is to be made at time $t > 0$. How (if at all) should the plaintiff be compensated for this fact?

- A dollar today is worth more than a dollar tomorrow – this is the concept of the time value of money
- The yield of the 6-month or 1-year U.S. Treasury bills is a reasonable commercial rate, as it compensates claimant for the time value of money

First QE Report, ¶¶ 102-112, Second QE Report, ¶¶ 191-192; **QE-0031**, p. 146.

# THE WACC IS NOT AN APPROPRIATE INTEREST RATE

- The WACC represents the minimum rate of return that an investor requires to invest in assets or projects subject to business risk
- Applying the WACC as an interest rate to a damages award is incorrect, since those rates include compensation for *ex ante* risks to which the damages award is not subject
- These *ex ante* risks include business risks such as that Panama would change its spending plans, that Omega Panama would be unsuccessful in its bids, or that it would experience costs overruns in the projects it won
  - These future risks do not affect the amount of compensation once it has been decided by the Tribunal
- Thus, from an economic perspective, interest must compensate for the time value of money, but not for risks that do not apply to the amount of compensation

Second QE Report, ¶¶ 175-192.

# ECONOMIC THEORY AND PRACTICE SUPPORT THE USE OF THE RISK-FREE RATE



### Fisher and Romaine

The fallacy here (in either version) has to do with risk. The plaintiff's opportunity cost of capital includes a return that compensates the plaintiff for the average risk it bears. But, in depriving the plaintiff of an asset worth Y at time 0, the defendant also relieved it of the risks associated with investment in that asset. The plaintiff is thus entitled to interest compensating it for the time value of money, but it is not also entitled to compensation for the risks it did not bear. Hence prejudgment interest should be awarded at the risk-free interest rate, $r^* < r$.

### Beharry

Second, the argument that the risk-free rate undercompensates claimants because it deprives them of the upside of a risky investment is flawed on multiple levels. The fundamental problem with this argument is that because the claimant never undertook the investment, it never bore any of the associated risks. Moreover, while the investor may have been deprived of the chance to make financial gains, it was equally relieved of the risk of financial losses.[104] That is because not all risky ventures will turn out positively. It is the presence of uncertainty and risk that make it necessary to compensate investors with a higher return.[105] In the case of compensating an investor for a wrongful act, a tribunal is dealing with an environment of certainty. Once the wrongful act has been committed, the claimant faces no market or commercial risk.[106]

### Dolgoff and Duarte Silva

That is the nature of risky investments; sometimes they work out well, and sometimes they do not. Investors require compensation for risk, but actually delivering that compensation cannot be guaranteed. In other words, the *expected* value of the asset at the award date is not the *actual* value of that asset on that date.

### Kantor

In either a lost profits or diminution of value computation, two scenarios will be employed, the "but-for" scenario and the "impaired" scenario. In each case, the scenarios will employ equivalent dates. Historic earnings must be "brought forward" to the valuation date by means of an interest rate, while future earnings are discounted back to the valuation date by means of a discount rate. The interest rate used for bringing historical amounts forward will clearly not contain the same risk factors as the discount rate used to present value future amounts. As a practical matter, the interest rate used for the historical amount is often a "risk-free" rate (such as the rate for US Treasuries) or a statutory rate for pre-judgment interest.[159]

Second QE Report, ¶¶ 181-190; **QE-0031**, p. 146; **QE-0112**, p. 75; **QE-0107**, p. 442; **QE-0032**, p. 49.

# ECONOMIC THEORY AND PRACTICE SUPPORT THE USE OF THE RISK-FREE RATE

194. The proper role of the payment of interest is to fulfil the duty to compensate the Claimant for the whole of its loss. One cannot know what a Claimant would have done had it been paid USD8.5 million in June 2005. It might have made spectacularly good, or disastrously bad decisions on the investment of such a sum. The cautious approach is to assume, in the absence of evidence to the contrary, that its loss would have been at least that of the principal sum plus interest gained from risk-free investments. It is plain that had that sum been invested

**Sistem Mühendislik v. Kyrgyz Republic**

**Burlington v. Ecuador**

That being said, the Tribunal agrees with Ecuador that the WACC is not necessarily the appropriate actualization rate for this purpose. The WACC contains an element of cost of capital that allows cash flows to reflect the time value of money, but it also includes a reward for all the risks involved in doing business. The WACC is thus appropriate to discount *future* cash flows, because these flows are adjusted to reflect the time value of money (i.e., that 100 dollars in the future are worth less today) and to reflect the risks of doing business due to the fact that the operator's profit-making capacity is not certain.

By contrast, using the WACC as an actualization rate for *past* cash flows could overcompensate Burlington. While the WACC contains an element of cost of capital that would allow past cash flows to reflect the time value of money (i.e., that 100 dollars in the past are worth more today), it also contains an element of reward for risk that is inappropriate here because Burlington no longer bears the risk of operation. As Fisher and Romaine conclude in the paper quoted below, a claimant is entitled to interest compensating for the time value of money, but not for risk:

Second QE Report, ¶¶ 181-190; **QE-0108**, ¶ 194; **QE-0109**, ¶¶ 532-533