ANNEX X

PETROLEUM FUND TIMOR-LESTE

ADVICES PROVIDED BY

INVESTMENT ADVISORY BOARD (IAB)

IN 2009

Strictly confidential in accordance with Article 32.2 (d) of the Petroleum und Law

Investment Advisory Board

Date: 16th December 2009

To
H.E. Mrs. Emilia Pires
Minister of Finance
Democratic Republic of Timor-Leste

Subject: Request for advice on the Petroleum Fund's long term investment strategy and Petroleum Fund Law amendments

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Referring to the letter dated 25 June 2009, the Minister has requested the Investment Advisory Board to provide advice on the Petroleum Fund's long term investment strategy and Petroleum Fund Law amendments.

The Investment Advisory Board has in its meetings on 28 August, 18 September, 6 November, 11 November, 20 November and 15 December 2009 thoroughly considered the request from the Minister and the draft proposal of amendments to Articles 14 & 15 of the Petroleum Fund.

The attached paper containing the advice on the investment strategy and amendments to Articles 14 & 15 of the Petroleum Fund was adopted by the Board on 15 December 2009.

Yours sincerely

Olgario de Castro
Investment Advisory Board
Chairman

<u>Attachment:</u>

Review of Articles 14 & 15 of the Petroleum Fund Law

Investment Advisory Board, 25 December 2009

Review of Articles 14 and 15 of Petroleum Fund Law

Background

On 25 June 2009 the Minister wrote to the Investment Advisory Board (IAB) seeking advice on proposed amendments to Articles 14 and 15 of the Petroleum Fund Law. The Minister has requested the IAB to provide a proper analysis that underpins the recommendations provided, and with this in mind this discussion paper has been developed to raise issues on the proposed drafting of the two Articles for the Board's consideration as well as offering proposed amendments to the draft text that the Board may wish to consider.

It is understood that the Ministry of Finance is working on other amendments to the Petroleum Fund law, and in submitting this paper the IAB is conscious that the Board has been asked to comment on two Articles without being provided with the details of any other proposed changes to the law. As Articles 14 and 15 incorporate both governance and investment principles, the comments that follow are premised on the governance and management principles that underpin the existing Petroleum Fund law.

This paper sets out the Minister's draft of each section together with IAB's recommendation. The recommendation is supported by the reasons why the IAB has proposed the text as it is.

Summary

The Investment Advisory Board recommends the Minister to include the following text in Articles 14 and 15 of the new Petroleum Fund Law:

Article 14 -Investment Rules

14.1 The Minister shall establish the investment policy for the Petroleum Fund that shall apply the principles of diversification with the objective of maximising the risk-adjusted financial returns of the Petroleum Fund after taking into account the purposes for which the Fund is established, the constraints under which it operates, and Timor-Leste's ability to bear risk.

14.2 The investment policy must provide sufficient liquidity in the portfolio to ensure that funding is available whenever required for transfers to the State Budget or for rebalancing investments within the policy exposure.

14.3 The Minister and the Operational Manager shall develop and maintain policies, systems and procedures to ensure that the risks associated with the implementation of the investment policy are identified, monitored and managed.

14.4 The management of the Petroleum Fund shall be conducted in compliance with all applicable regulatory and disclosure requirements of the countries in which investments are made.

14.5 The Minister shall present a summary of the proposed investment policy of the Petroleum Fund to the Parliament in the Annual Report of the Petroleum Fund each year and prior to decisions on major asset allocation changes. The Annual Report shall include a statement setting out how the provisions of Articles 14 and 15 have been applied during the year.

Article 15 -Eligible Investments

15.1 In order to qualify as an eligible investment under this Article an investment must be issued or situated abroad in an internationally recognised jurisdiction.

15.2 Not less than 60 per cent of the amounts in the Petroleum Fund shall be invested in eligible investments in the form of deposits or debt instruments that bear interest or a fixed amount equivalent to interest, provided that:

(a) the debt instruments are determined to be of investment grade, or

(b) the deposits are held with financial institutions with a rating corresponding to investment grade.

15.3 Not more than 40 per cent of the amounts in the Petroleum Fund shall be invested in eligible investments in the form of listed equities, provided that:

(a) the equities are traded in a regulated financial market.

(b) no holding shall exceed five per cent of the issued capital of the issuing company.

15.4 No more than 5 per cent of the amounts in the Petroleum Fund may be invested in other eligible investments provided that:

(a) the Minister has included the asset class to which the eligible investments belong in the proposed asset allocation presented to parliament in accordance with Article 14.5, and

(b) the policies and criteria for selecting, managing and valuing individual financial instruments within the asset class have been approved by the Minister and published.

15.5 The exposure of the Petroleum Fund to

(a) any one company or issuer, except for a sovereign state, in the form of eligible investments, shall not exceed three per cent of the total value of the Petroleum Fund;

(b) any one asset class shall, on a net basis, be positive.

15.6 Notwithstanding the provisions of subarticles 20.1 and 20.2, charges arising in the course of market transaction management or participation in security lending programs that are of a short-term nature and consistent with prudent asset management principles shall not be regarded as encumbrances in the course of investing amounts in the Petroleum Fund by the Investment Manager.

15.7 A derivative instrument shall qualify as an eligible investment only if:

(a) it is used for the purpose of reducing the risk to the Petroleum Fund from the underlying instrument or instruments or to facilitate the efficient implementation of asset exposure; and

(b) the risk from the derivative instrument is not larger than that which could be had by direct exposure to the underlying assets in accordance with this law; and

(c) the Minister has established conditions for the operational use of the derivative instrument.

15.8 The Minister shall determine the period within which Investment Managers shall be enabled to dispose of instruments in an orderly manner if they cease to be an eligible investments because of a change in the rating of the financial instrument or the issuer of the instrument.

Article 14

The Article is included in the law to provide a framework for the setting of the investment policies of the Fund. The drafting is predicated on the Minister being the person with the authority to set the investment policy, based on the following interpretation of the existing law:

- Article 11.1 gives the Government (though the Minister of Finance) the responsibility to determine the investment policies of the Fund.
- Article 11.2 gives the Minister the authority to make decisions about investment strategy after seeking the advice of the IAB.
- The wording of Article 16.1(a) envisages the IAB developing investment performance benchmarks, proactively if it sees fit, without having the authority to decide that the benchmarks thus developed should be adopted.

One of the key documents consulted in the course of reviewing this section was the International Working Group's "Sovereign Wealth Funds: Generally Accepted Principles and Practices", otherwise known as the Santiago Principles. The Santiago principles are an international cooperative effort to identify best practices for Sovereign Wealth Funds particularly in the area of governance and policy.

Article 14.1

Minister's Proposal	IAB Recommendation
14.1. The investment policies to be established by the Minister in accordance with Article 11.1 shall aim to maximize the risk-adjusted return by balancing expected return against expected risk and taking into account the purpose of the Fund and Timor-Leste's ability to bear such risk.	14.1 The Minister shall establish the investment policy for the Petroleum Fund that shall apply the principles of diversification with the objective of maximising the risk-adjusted financial returns of the Petroleum Fund after taking into account the purposes for which the Fund is established, the constraints under which it operates, and Timor-Leste's ability to bear risk.

Rationale

The objective of this paragraph is to ensure that the Minister establishes an investment policy that maximises the return of the Petroleum Fund investments after taking account of the inherent risks in international financial markets and constraints affecting local conditions.

The **investment policy** is a formal statement of the risk profile and the asset allocation of the Fund, investment universe and benchmarks, investment principles, such as the use of internal/external managers and investment style, and other issued related to the overall investment policy.

Principle GAPP 18 of the Santiago principles requires that "The SWF's investment policy should be clear and consistent with its defined objectives, risk tolerance, and investment strategy, as set by the owner...". Furthermore, the sub principles refer to the investment policy including the possible use of leverage, use of derivatives, the extent to which internal/external managers are used, including qualitative statements on investment style (active/passive, financial/strategic) or investment themes.

The Petroleum Fund would meet this principle by producing a public document covering the various factors outlined above.

The term "investment strategy" is mentioned in GAPP18, but not referred to in the proposed Article as it is part of the investment policy.

Diversification is the process of investing in a range of assets or asset classes with different risks, returns and correlations in order to minimise nonsystematic risk, which is also known as diversifiable risk. Diversifiable risk is that portion of an asset's risk arising from the unique circumstances of a specific security, as opposed to the overall market and is unique to a given asset. Business, liquidity, and default risks fall into this category. It is assumed that any investor can create a portfolio in which this type of risk is reduced or completely eliminated through diversification, namely the combining of several diverse investments in the portfolio.

The expression **"maximising the risk-adjusted financial returns"** reflects the wording in principle GAPP19 of the Santiago principles.

The return received should be taken from the viewpoint of a long-term investor such as the Petroleum Fund, which is the means of managing the financial reserves of Timor-Leste for the benefit of current and future generations. Long-term returns include both income and capital gains. Forecasting the future is an inexact science at best, and for this reason the investment policies cannot be guaranteed to produce actual long-term terms, hence the wording setting an objective, rather than a requirement. It is implicit that the investments in the Fund cannot be expected to produce consistent returns in the short term, hence the requirement to consider the long-term returns.

The requirement for Minister to take various factors into account (the **purposes, constraints and risks**) is intended to broadly parallel a similar set of factors that the IAB must consider in Article 16.3 in order to ensure consistency in the governance framework, though the proposed wording in this paragraph is deliberately broader to enable the possibility that the Minister may take into account factors beyond those that the IAB is required to consider.

The phrase **"Timor-Leste's ability to bear risk"** has been included in line with the Minister's proposal. The phrase means that decisions on the risk profile of the Fund should be based on a very broad perspective on how the Fund functions in the economy. Examples of possibly relevant issues include the Fund's impact on variability in Government income, the fraction of total petroleum wealth transferred to the Fund, the sustainability of the fiscal policy for a given level of risk in the Fund, the operational capacity of key institutions, and the capacity of the fund's stakeholders to bear adverse outcomes without undermining necessary political conditions for the existence of the fund.

Article 14.2

Minister's Proposal	IAB Recommendation
14.2 The investment policy must provide sufficient liquidity in the portfolio to ensure that funding is available whenever required for transfers to the State Budget or for rebalancing investments within the policy exposure.	Same

Rationale

This paragraph is intended to ensure that the Fund will be sufficiently liquid to enable transfer to the State Budget, and to enable rebalancing to take place.

The existing law is drafted on the presumption that the IAB will recommend a strategy that must take liquidity into account (as it is required to do under Article 16.3(c)) and that the Minister will accept and implement the policy, thereby ensuring sufficient liquidity is available. The current paragraph removes the possibility that the Minister may act contrary to the advice of the IAB and decide to invest the Fund in illiquid assets that would prevent transfers to the State Budget.

A further requirement is added that does not have a parallel in the existing law, namely that the Fund must also maintain sufficient liquidity to allow rebalancing of investments to take place "within the policy exposure".

Article 14.3

Minister's Proposal	IAB Recommendation
14.3 The Petroleum Fund shall be managed responsibly using the principle of diversification to seek wide exposure and avoid excessive risk, subject to sound and internationally well recognized principles for operational control and risk management.	14.3 The Minister and the Operational Manager shall develop and maintain policies, systems and procedures to ensure that the risks associated with the implementation of the investment strategy are identified, monitored and managed.

Rationale

The principle of diversification (which implicitly includes the breadth of exposure and the reduction of risk) has been moved to Article 14.1 as it is more closely associated with the development of the investment strategy than with the implementation of the policies.

This paragraph has been redrafted to focus on the second half of the Minister's proposal, and to broaden the responsibilities. The recommended text requires that all risks, both financial and operational, are subject to appropriate risk management processes.

A minimum range of ways in which risk can be managed are included, namely through risk management policy, systems and procedures.

The reference to "internationally well-recognised principles for operational control and risk management" has been removed as it is may not be clear which particular principles are to be applied. The requirement to "identify, monitor, and manage" risk implies that a certain standard will be met, in the same sense that the word "management" is used in Article 11.1 without the need to specify "in accordance with international best practice" or similar wording. It also avoid the need to raise the question "Although we are identifying, monitoring managing risk, is it possible that with the benefit of hindsight someone may claim that an international principle could be deemed to have set a higher standard than was applied?"

The requirement to ensure that risks are "identified, monitored and managed" reflects the Santiago principle 19 "The SWF shall have a framework that identifies, assesses and manages the risks of its operations" and GAPP22.1 "The risk management framework should ... enable the adequate monitoring and management of relevant risks ..."

It is intended that the phrase "The Minister and the Operational Manager shall develop ... procedures" should be interpreted to mean that both parties shall work in conjunction as appropriate to implement a risk management framework, as well as individually to manage risk in areas of specific responsibility.

Article 14.4

Minister's Proposal	IAB Recommendation
14.4. The Petroleum Fund shall be managed in full compliance with all applicable regulatory and disclosure requirements and avoid any real or apparent conflict of interest.	14.4. The management of the Petroleum Fund shall be conducted in compliance with all applicable regulatory and disclosure requirements of the countries in which investments are made.

Rationale

The intention of this paragraph is to ensure that the investments of the Fund are made in full compliance with appropriate regulatory requirements in the various markets in which the Fund will be investing.

The proposed wording reflects the wording in Santiago principle GAPP 14.4 "SWF operations and activities in host countries should be conducted in compliance with all applicable regulatory and disclosure requirements of the countries in which they operate." The drafting is not intended to suggest the tautology that investment laws must be complied with. Rather it makes a statement that the Fund's investment activities will take place responsibly and transparently in other countries.

The wording about conflicts of interest has been removed because the subject is integral to the principles of good governance, which is mandated by the existing Article 11.4. Paraphrasing the 2004 OECD principles of Corporate Governance (bearing in the they are directed at the commercial sector) the components of good governance are the governance framework; the protection of stakeholder rights (a part of which is the avoidance of conflicts of interest); the provision of reliable and timely information to stakeholders; governing board effectiveness (including monitoring conflicts of interest and the ensuring that sufficient independent non-executives are part of the decision-making process where there is a potential for conflicts of interest).

Several of the Santiago principles address the question of governance, including GAPP6 ("The governance framework for the SWF should ... facilitate accountability and operational independence") and GAPPB ("The governing body(ies) should act in the best interests of the SWF ..."). It is argued that these and other governance-related Santiago principles are included by implication in Article 11's phrase "in accordance with the principle of good governance"

Article 14.5

Minister's Proposal	IAB Recommendation
None.	14.5 The Minister shall present a summary of the proposed investment policy of the Petroleum Fund to the parliament in the Annual Report of the Petroleum Fund each year and prior to decisions on major asset allocation changes. The Annual Report shall also include a statement setting out how the provisions of Articles 14 and 15 have been applied during the year.

Rationale

The intention of this paragraph is to recognise the added flexibility in the proposed Articles 15.2 and 15.3, which would allow the Minister a greater degree of discretion about the assets classes in which the Fund should be invested. The intention is to include the proposed provision in the law to ensure that the Minister informs the Parliament on an annual basis how the investment policy and rules outlined in Articles 14 and 15 have been applied and how the Government, going forward, sees changes in the investment policy for the next year. This information should be provided in the Annual Report to ensure a high degree of accountability and transparency.

Moreover, the Minister must inform the Parliament about major assets allocation changes prior to confirming the decision. This may take place through submissions of written reports to Parliament, such as a White Paper or other appropriate documents, as seen fit.

The paragraph is not intended to restrict the Minister's authority to make the investment strategy or to determine the preferred asset allocation (within the constraints of the rest of Article 15) but to provide a means for acquiring broad stakeholder acceptance of the change. It may be seen as an alternative to the explicit review period in the current law to bring the procedures for obtaining stakeholder acceptance more in line with parliamentary traditions in other countries with sovereign wealth funds.

This paragraph has been added to ensure compliance with Santiago principle GAPP18.3 "A description of the investment policy of the SWF should be publicly disclosed."

The words "proposed investment policy" are to make clear the intention that the government not be bound by the summary submitted to parliament to any greater extent than the government is bound by other statements of intention regarding its activities.

The intention of including the proposed investment policy in the Annual Report is to not only inform parliament of the policy in a document which will not be bound by vote, but to provide a forwardlooking section that can act as a benchmark against which the statement of compliance in the following year's Annual Report can be measured.

Article 15

This Article is included in the law to provide specific guidelines for the investment of the Petroleum Fund. The intention of the guidelines is to set statutory limits on the manner in which parts of the portfolio may be invested, while retaining sufficient discretion for the Minister on advice from the IAB to determine the strategic asset allocation within those limits.

The Article also enables the Fund to engage in asset management activities such as securities lending and the use of derivative instruments under defined conditions.

Asset Allocation Limits

The inclusion of specific maxima/minima for certain classes of assets in the Law is intended to provide a balance between the role of parliament to set overall limits on the investment strategy and the Minister's/IAB's role in determining the asset allocation strategy at any particular point in time within those limits. Below follows a discussion about the appropriate level of asset allocation limits in the Law and the rationale behind the specific numbers provided in Articles 15.2, 15.3 and 15.4.

Watson Wyatt Analysis

The Investment Advisory Board has reviewed the report "From Oil to Financial Assets: Planning for a Sustainable Future for Timor-Leste" provided by Watson Wyatt on request of the Ministry of Finance

The Board notes the following key findings in the Watson Wyatt Report:

1. An allocation to equities of at least 25% is required to achieve a long term real return of 3% per annum according to historical experience and our forward looking modelling.

2. A higher allocation to equities provides a higher long term expected return, but also a higher level of expected risk. For example, the expected return in a 1 in 20 poor year under a 25% equities strategy is -9%, whereas it is -28% for an 80% equities strategy.

3. There may be potential diversification benefits from including alternative investments such as real estate, private equity and hedge funds in the portfolio; however allocations to these asset classes also give rise to issues that include the burden on stakeholders' time, higher fees, liquidity risks and general levels of complexity.

4. A level of ESI spending will not be sustainable unless it is coupled with an investment strategy that expects to achieve a real return consistent with that level of spending.

The Watson Wyatt (WW) report illustrates the connection between asset allocation, expected return, spending guideline and the sustainability of the fund construction. The asset allocation should, with reasonable confidence, be able to produce an annual real return similar to the spending guideline over a long time horizon. The actual return would fluctuate from year to year and could deviate substantially from the long-term expectation.

The key findings are summarized in the table below:

Table 7: Historical returns on a range of investment strategies since 1900

Historical performance since 1900	100% US Govt Bonds	Current	25% US Equity	40% US Equity	60% US Equity	80% US Equity	100% US Equity
Average real return (% pa)	2.0	2.2	3.4	4.3	5.5	6.8	8.1
Geometric real return (% pa)	1.7	2.0	3.1	3.8	4.7	5.5	6.1
Standard deviation of return (% pa)	5.2	5.1	6.5	8.8	12.3	16.2	20.2
Information Ratio	0.33	0.39	0.48	0.43	0.38	0.34	0.30
Frequency of negative annual return	9%	9%	12%	20%	27%	30%	30%
Frequency of four consecutive negative quarterly returns	0.9%	0.9%	1.6%	2.5%	2.5%	3.2%	3.2%
1 in 20 year poor outcome (% pa)	-1.6	-0.9	-4.7	-6.2	-11.5	-17.2	-22.1

Source: Watson Wyatt Report, December 2009

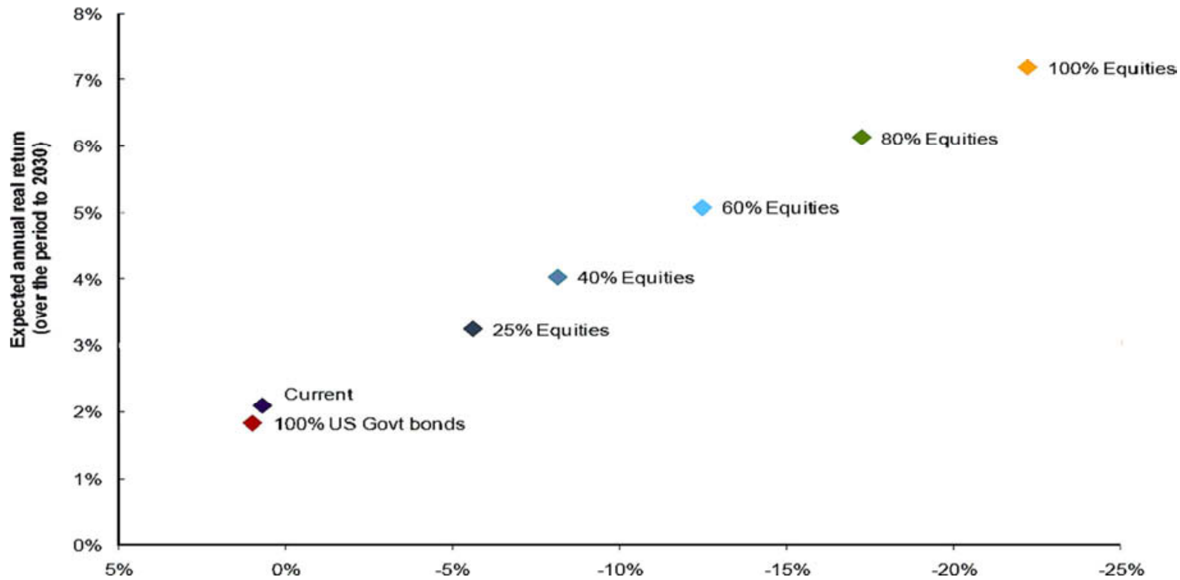
The table summarizes the historical return and risk figures for various asset allocation options. All asset allocation options which include more than 25% in equities have achieved more than 3% historical real rate of return. The current investment strategy has underperformed the ESI level by 1%, while 25% and 40% equities have outperformed the ESI level of 3% by 0.1% and 0.8% respectively on a historical basis.

The standard deviation of return increases by 1.4% and 3.7% (to 6.5% and 8.8%) from the current asset allocation (5.1%) to the options including 25% and 40% in equities respectively. This means that for 213 of the years the current strategy has given a real rate of return in the interval of -3.1% and 7.1%, while the corresponding intervals are -3.4% and 9.6% and -5% and 12.6% for the 25% and 40% equity option respectively.

The frequency of negative annual return increased from 9.2% to 11.9% and 19.3% respectively for these two asset allocation options. This means that the current strategy as well as 25% in equities has given negative return approximately every ten year while the frequency doubled to every fifth year with 40% allocation to equities. Hence, by moving to 25% equities we can support the current ESI level while keeping the risk level close to what we have been used to so far.

Turning to the forward looking modelling carried out by Watson Wyatt, the figure below shows the expected real return for different asset allocation options subject to these options risk profile. Risk is measured by “5% Tail Conditional Expectations” which shows what the expected return will be for the 5% worst outcomes (every 20 year). The graphs shows that all asset allocations above 25% expect to achieve 3% real rate of return, but the higher the allocation to equities the higher is the expected risk.

Forward looking risk/return frontier of different strategy returns

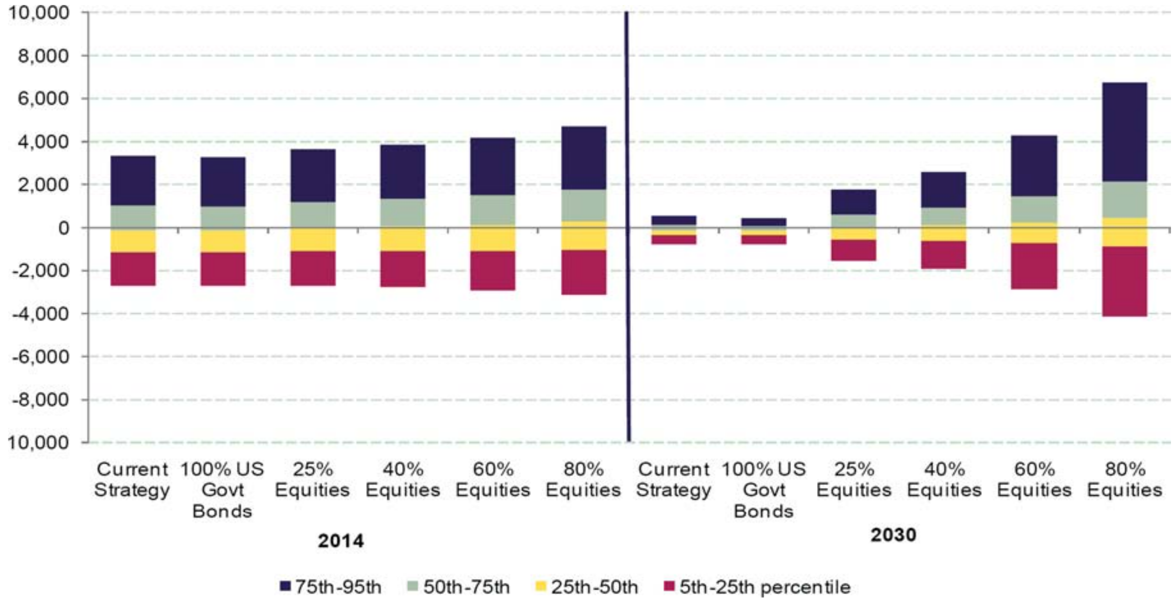


5% Tail Conditional Expectation
(Average for one year periods over the period to 2030)

Source: Watson Wyatt Report, December 2009

Another aspect that Watson Wyatt has highlighted in its report is the fact that the impact of the year to year growth of the Petroleum Wealth differs from the short to the long term. As Timor-Leste is in the process of transferring wealth from petroleum to financial assets, at the current stage most of national wealth is under the sea, hence the risk-return profile of the financial assets (the Fund) has a relatively modest impact on the risk-return profile. This is shown in the figure below.

YoY growth in real Petroleum Wealth in 2014 8 2030 (USD millions)
Ministry of Finance oil price projection
3.0% ESI spending rate



Source: Watson Wyatt Report, December 2009

The left part of the figure shows that the various asset allocations have no or little impact on the year to year growth in the Petroleum Wealth over the next 5 years. This picture changes dramatically in the right part of the figure which depicts 20 years into the future. This is due to both that the differences in expected returns are put to work for a longer period and that a much larger fraction of total national wealth will be accumulated in the Fund.

Short and medium term investment strategy

Bearing in mind Watson Wyatt's statement that a level of ESI spending will not be sustainable unless it is coupled with an investment strategy that expects to achieve a real return consistent with that level of spending, it is the view of the Investment Advisory Board that the Fund should aim for increasing the exposure to equities to 25% as soon as practicable (1-2 years after the new Law has been adopted). The expected risks are modest, while the increase in expected return will, with a high level of probability, ensure that an ESI level of 3% is sustainable in the long term.

However, adding more risk beyond what is regarded sufficient to achieve an expected real return in accordance with the spending rule is not appropriate at this stage, and hence the IAB recommends the exposure to equities during the next five year period not to exceed 25.30%. The responsibility of fine tuning the actual investment strategy, however, should be with the Minister and her Investment Advisory Board.

The Investment Advisory Board believes that there are three main reasons why the current and immediate risk profile for the fund should be more conservative than a similar fund in a fully developed country. One is the oil price volatility which Timor-Leste is already exposed to, another is the macroeconomic reality of Timor-Leste and a third is the maturity of the responsible institutions and stakeholders.

Timor-Leste's resources are primarily divided between petroleum assets still in the ground and the funds invested in the Petroleum Fund. The future petroleum revenues amount to approximately 70% of Timor-Leste's Petroleum Wealth. The petroleum assets in the ground have a volatile price that adds a level of uncertainty to the total equation before the equity/bond split of the money in the fund is even considered. The overall risk exposure of the total petroleum revenues must be taken into account when considering the appropriate risk level.

The macroeconomic reality of Timor-Leste is such that the Petroleum Fund will comprise a large part of the revenue base of the country and will imply a relatively moderate risk profile in the fund for a long time to come. The appropriate risk profile must be seen in conjunction with the size of the tax base for the Government. The best way to achieve financial stability is to show the world that Timor- Leste can manage the fund prudently for the long term within a strong institutional setting and with a viable economic policy.

Another consideration is the maturity of the responsible institutions and stakeholders in Timor-Leste to manage the Fund in a way which ensure as low operational risks and headline risks as possible. As the capacity and skills are increasing, although from a low starting point, the maturity of the stakeholders at large may hopefully cease to be a constraint within the short and medium term.

Asset allocation limits in the Law

The Board believes there should be limits in the Law to force a broader anchoring of the risk profile with key stakeholders, in particular the National Parliament. The IAB sees that as paramount to achieving a stable environment for economic development in Timor-Leste. The reason is that there should not be too large deviation between what is written as a limit in the law and what is actually implemented in the portfolio.

On this basis, the Board recommends including the following asset allocation limits in the Law:

- Article 15.2 (minimum allocation to fixed instruments): 60%
- Article 15.3 (maximum allocation to listed equities) : 40%

In practice, asset allocations in the Law, under normal circumstances, would not constrain the Government's flexibility to pursue an appropriate investment strategy, but may prevent a future Government from changing the adopted investment strategy without properly anchoring the risk profile among the stakeholders. The Board believes an investment limit of 40% in listed equities would provide the necessary flexibility.

The Board would not recommend leaving it completely open in the Law and for the incumbent Government to decide how much to allocate to equities. This is necessary in the present context where there are insufficient demonstrated abilities of successive governments and the National Parliament in comprehending and living with various risk-return profiles.

However, the Board believes the Management Agreement between the Ministry of Finance and the BPA should be the instrument to regulate and fine tune the investment strategy, within the limits set out in the Law, based on decisions made by the Minister after receiving advice from the IAB.

In conclusion, the Board regards it prudent to allow up to 40 % in listed equities in the Petroleum Fund Law.

<u>Statement from the Chairman. Mr. Olgario de Castro:</u>

The chairman has the view that philosophically there are no technical reasons why asset allocation limits should be legislated by Parliament.

Furthermore independent advice on Asset allocations by the Board should not be conditioned or constrained by artificial limits imposed by legislation but on considered studies and assessment of the risk profiles of the stakeholders of the Fund.

Article 15.1

Minister's Proposal	IAB Recommendation
15.1 In order to qualify as an eligible financial instrument under this Article, such instrument must have been issued abroad, regulated according to internationally recognized standards and satisfy the other requirements in this Article.	15.1 In order to qualify as an eligible investment under this Article an investment must be issued or situated abroad in an internationally recognised jurisdiction.

Rationale

The intention of this paragraph is to set broad guidelines that must be met by all Petroleum Fund investments.

It seems there are two: first that the investments must be situated abroad. This is one of the fundamental premises on which the PF was founded.

Second, the investments must be issued or be situated in countries where there is a reliable and safe legal system. This provision is included to restrict investments to countries that have reliable and safe legal systems, thereby ensuring that the Petroleum Fund will be able to minimise its legal risks. It is included to ensure that investments are made where the legal system will not cause loss in the case of a default and/or enable the Fund to fully protect its interests in countries where contracts, including financial contracts, will be reliably resolved by the legal system, should that prove necessary.

The words 'internationally recognised' have been used to allow investments in a range of markets with functioning legal systems on which reliance can be placed without raising the need for the management of the Petroleum Fund, at various levels, to be required to interpret more specific wording on an ongoing basis. In practice, the wording may be interpreted to mean that instruments that are included in a recognised industry benchmark index will be deemed to be issued from a jurisdiction recognised at least by an entity with the capability of making such judgements, namely the index provider.

The wording of the Minister's recommendation referring to 'financial instruments' has been removed to reflect the intention in a later paragraph to invest part of the Fund in real estate and/or other asset classes that may not be financial instruments.

The reference to regulatory standards has been removed because private equity and real estate, for example, are not regulated.

Article 15.2

Minister's Proposal	IAB Recommendation
15.2 Not less than 20/40/60 percent of the amounts in the Petroleum Fund shall be invested in financial instruments or deposits that bear interest or a fixed amount equivalent to interest, provided that: (a) the financial instruments are determined to be of investment grade by a leading international rating agency; or (b) the deposits are held with an entity with a long term rating corresponding to investment grade as determined by a leading international rating agency."	15.2 Not less than 60 per cent of the amounts in the Petroleum Fund shall be invested in eligible investments in the form of deposits or debt instruments that bear interest or a fixed amount equivalent to interest, provided that: (a) the debt instruments are determined to be of investment grade, or (b) the deposits are held with financial institutions with a rating corresponding to investment grade.

Rationale

The intention of this paragraph is to regulate the investments that the Petroleum Fund may make in fixed interest instruments.

There are two categories of fixed interest investments permitted under this paragraph:

- Debt instruments, in the form of bonds or bills, which pay interest either in the form of a regular stream of coupons, or through the amortisation of a discount.
- Bank deposits.

The existing restriction on the issuer being a government or supranational has been removed, and the proposed drafting permits investment in instruments issued by any issuer that have been classified as investment grade. Investment grade bonds are generally more appropriate for conservative investors. These bonds typically provide the highest degree of principal and interest payment protection, and they are generally the least likely to default. Below investment grade bonds may be suitable for more aggressive investors willing to accept greater degrees of credit risk in exchange for significantly higher yields. Historically (10 years up to 2007) 2.09% of corporate investment grade (Moody's) instruments have defaulted, compared with 31.37% of non-investment grade corporate instruments, with the equivalent figures for S&P being 4.14% and 42.35%.

The meaning of the term "investment grade" is specific and well-recognised, namely all debt instruments:

- Rated as Baa3 or better by Moody's. A Baa3 debt instrument (the minimum permissible rating) is defined as "[lacking] outstanding investment characteristics and have speculative characteristics as well."
- Rated as BBB- or better by Standard and Poor's and Fitch. A BBB- debt instrument is defined as "Adverse economic conditions are more likely to lead to a weakened capacity of the issuer to meet its financial commitment."

These ratings are long-term ratings. Short term instruments are separately rated with the minimum rating to be classified as 'investment grade' being P-3 (Moody's), A-3 (S&P) and A3 (Fitch). The reference to 'long-term' to define the credit rating has been removed, so that a short-term bank deposit would be benchmarked by the bank's short-term credit rating.

The interpretation of 'investment grade' has been intentionally left undefined to avoid the operational issues associated with detailed legal requirements being placed on individual instruments, when the management focus by the IAB and the Minister should be on asset classes. The intention is to allow investments to be considered in light of both the rating of the issuer as well as the rating on the instrument itself. For example, non-rated bonds issued by a well-rated sovereign are excluded from the list of eligible investments in the current law, even though they share the same characteristics of rated bonds issued by the same sovereign. On the other hand, a risky instrument issued by a well-rated entity would be excluded under the definition.

For comments to the specific asset allocation limits, please see the initial discussion under Article 15.

Article 15.3

Minister's Proposal	IAB Recommendation
"15.3 Not more than [100-20/40/60] per cent of the amounts in the Petroleum Fund may be invested in equities, provided that: **(a) the equities are listed and openly traded in a financial market of the highest regulatory standard; and** **(b) no holding represents more than five per cent of the outstanding shares of any individual company."**	15.3 Not more than 40 per cent of the amounts in the Petroleum Fund shall be invested in eligible investments in the form of listed equities, provided that: (c) the equities are traded in a regulated financial market. (d) no holding shall exceed five per cent of the issued capital of the issuing company.

Rationale

The intention of this paragraph is to regulate the investments that the Petroleum Fund may make in listed equities.

All investments in listed equities shall take place in regulated markets. This will, as a general rule, contribute to the liquidity and transparency of pricing and valuation information, so that equities may be bought and sold in an orderly manner (as will be required for rebalancing purposes) and will be subject to regulatory oversight. Furthermore, the value of the assets as reported from time to time by the Petroleum Fund will be a reliable reflection of what the market believes to be their underlying value.

Furthermore, the Petroleum Fund will not obtain a significant holding in any one company. The objective implicit in this statement is that the Petroleum Fund will not take strategic positions in a company that may bring about obligations over and above those of a small passive investor. This requirement also provides statutory clarity that the Petroleum Fund will not be used to make strategic or politically motivated investments.

For comments to the specific asset allocation limits, please see the initial discussion under Article 15.

Article 15.4

Minister's Proposal	IAB Recommendation
"15.4 Not more than [y] per cent of the amounts in the Petroleum Fund may be, in accordance with all procedures laid down in this Act, invested in other financial instruments, including private unlisted equities and real estate."	15.4 No more than 5 per cent of the amounts in the Petroleum Fund may be invested in other eligible investments provided that: (a) the Minister has included the asset class to which the eligible investments belong in the proposed asset allocation presented to parliament in accordance with Article 14.5, and (b) the policies and criteria for selecting, managing and valuing individual financial instruments within the asset class have been approved by the Minister and published.

Rationale

The intention of this paragraph is to permit the investment of a limited amount of the Petroleum Fund in any other investments other than investment grade fixed interest and listed equities.

The paragraph has been drafted in a manner that allows the Minister maximum flexibility in choosing the investments but balances that flexibility with strict accountability and transparency rules.

The remainder of the PF law sets operational limits on what the Minister may do. The Minister may not, for example, make a decision to invest in an ad hoc manner in an asset class which has not previously been advised to parliament (proposed Art 14.5). Nor may the Minister make a decision to invest in a new asset class, or change the mandates for existing investment classes without first seeking the advice of the Investment Advisory Board (Art. 11.2) whose advice will be published.

Furthermore, the proposed wording requires that the Minister determine and publish the rules for investing in financial instruments within an asset class before making the investment, so that the actions may be carried out with the highest standard of transparency (Art 32.1).

Bearing in mind Watson Wyatt's statement that there may be potential diversification benefits from including alternative investments, but that allocations to these asset classes also give rise to issues including the burden on stakeholders' time, higher fees, liquidity risks and general levels of complexity, the IAB recommends to limit the exposure to other eligible instruments than fixed interest investments and listed equities to maximum 5%. The IAB believes that higher risk exposure primarily should be achieved by changing the benchmark in the equity portfolio (Small value, REITS) rather than bearing the cost of more complex asset classes. However, there could be a rationale to have a "safety valve" in the law in case there are issues which are not predictable at the current stage.

Article 15.5

Minister's Proposal	IAB Recommendation
15.5 The total exposure to any individual company or issuer, except for a sovereign State, in the form of investments in debt instruments, shares or any other individual securities, assets or deposits, may not in total exceed three percent of the amounts in the Petroleum Fund.	15.5 The exposure of the Petroleum Fund: (a) to any one company or issuer, except for a sovereign state, in the form of eligible investments, shall not exceed three per cent of the total value of the Petroleum Fund; (b) to any one asset class shall, on a net basis.

Rationale

The intention of this paragraph is to limit the exposure of the Fund, firstly by limiting the amount that may be placed into a single financial investment. It is intended to cap the loss at 3% of the Fund's total value in the event of an unexpected catastrophic failure of an individual company or financial institution. For example, it would not be possible for the Fund to withdraw a time deposit at a leading bank that found itself in financial difficulty.

In the 2008-9 global financial crisis governments stepped in to prevent systemically important banks from failing. However, the implicit guarantee that governments have given to large banks is being questioned, and a review of issues such as whether any institution should be 'too big to fail' may lead to moves to reduce or remove the moral hazard that governments have incurred. Accordingly, it is believed that the Fund should limit its exposure to individual entities as a matter of policy.

Based on the Fund's current size of about $5 billion, the three per cent limit would be about $150 million.

Secondly, the intention to limit the exposure by preventing short positions to be taken against an individual asset class. By including the words "on a net basis" the intention is to permit short positions in individual instruments that may be taken in the normal course of active management, but not so much as to short an entire asset class.

The provision will also, by implication, prevent the Fund from borrowing (i.e. going short in cash) to finance investments in other asset classes.

An asset class is a group of securities that exhibit similar characteristics, behave similarly in the market, and are usually subject to the same laws and regulations. The three major asset classes are equities (stocks), fixed-income (bonds), and cash equivalents (money market instruments). Other asset classes include real estate, commodities, and possibly derivative instruments such as options and futures contracts, natural resources, and precious metals. Asset classes can be analysed into asset class categories, for example, equities can be analysed by size (large-cap, mid-cap and smallcap) or style (growth, blend, value). A blend of asset classes and asset class categories is necessary for diversification purposes.

Article 15.X

Minister's Proposal	IAB Recommendation
None	15.6 Notwithstanding the provisions of subarticles 20.1 and 20.2, charges arising in the course of market transaction management or participation in security lending programs that are of a short-term nature and consistent with prudent asset management principles shall not be regarded as encumbrances in the course of investing amounts in the Petroleum Fund by the Investment Manager.

Rationale

The intention of Article 20 is to prevent the State from entering into contracts that mortgage the Petroleum Fund assets or its future income stream. On the other hand, the transfer of assets through the world's clearing and settlement systems, or maintaining a margin account, in the normal course of trading are normal practices in terms of the Fund's investing operations. These operational arrangements may potentially and incidentally expose the assets to liens or charges, and a strict interpretation of Article 20 in the light of information that may come to hand about such arrangements in future may prevent the effective implementation of the investment policy.

In the meantime, Article 20 has been strictly applied to the global custody agreement and the existing investment management agreement (IMA), and is reflected in the provisions of the BPA's standard IMA to be used in future. However, the BPA does not have the ability to dictate or contract out of the terms of third-party contracts on which the BPA's counterparts rely in order to carry out their obligations.

This proposed paragraph also provides explicit authority to implement a lending programme, given that the lack of specific authority in the current law and questions of encumbrances have prevented the Fund from potentially adding millions of dollars of revenue to its income.

The paragraph is also intended to include the fact that in the course of asset management the assets under management may be subject to liens and encumbrances in the course of delivery and settlement as the result of various market agreements and conventions.

The emphasis on the drafting is on the short term, and that the arrangements must be consistent with those used by a prudently managed fund.

The wording, in part, reflects the wording in Santiago principle GAPP19.2 "The management of the SWF's assets should be consistent with what is [sic] generally accepted as sound asset management principles". The word "sound" has been replaced with "prudent" to maintain consistency with the use of the same word in the existing Article 11.4.

Article 15.6

Minister's Proposal	IAB Recommendation
15.6 A derivative instrument qualifies as a financial instrument for purposes of this Law only if it is used for the purpose of reducing the overall risk associated with the underlying instrument or instruments or to facilitate efficient implementation of asset exposure. The risk associated with the use of a derivative instrument shall not be larger than that entailed with direct exposure to the underlying assets in accordance with this law.	15.7 A derivative instrument shall qualify as an eligible investment only if: (a) it is used for the purpose of reducing the risk to the Fund from the underlying instrument or instruments or to facilitate the efficient implementation of asset exposure; and (b) the risk from the derivative instrument is not larger than that which could be had by direct exposure to the underlying assets in accordance with this law; and (c) the Minister has established conditions with respect to the operational use of the derivative instrument.

Rationale

Derivatives are widely and legitimately used in financial markets to manage risk and financial exposures. On the other hand, derivatives can also be used for highly speculative purposes, and difficulties arising from this latter approach have tainted the word 'derivative'.

It is the intention of the proposed wording to restrict the use of derivatives to legitimate management purposes, bearing in mind that the standard of prudence must be applied to all the Fund's investments. For this reason, the proposed wording is designed to prevent the use of derivatives to obtain financial leverage.

The reference to "the direct exposure to the underlying assets" as the reference point is designed to benchmark the use of derivatives with the underlying assets.

The objectives of this Article can be summarised as follows:

1. Investing in derivatives as a long term investment vehicle should in general not be allowed (because it is believed that the potential added value does not outweigh the increased complexity and operational risk)
2. Derivatives should be allowed to (quickly) reduce risk in the portfolio if that should be warranted
3. Derivatives should be allowed for operational or transitional purposes, i.e., when using them is the least costly way of making changes in the portfolio, or if using derivatives is the normal way of gaining exposure to an asset.
4. When derivatives are allowed, they should not be used so that the exposure (i.e., expected return and risk) in the portfolio can be very different from what is otherwise (without the use of derivatives) allowed under this law.

Given the variety of derivatives available, the role of this Article is to serve as guidance to the Minister when drafting the management agreement and investment guidelines to the operational manager.

The variety of derivatives also means that the references to reducing risk have been intentionally left open to interpretation - guidelines for reducing risk with one type of derivative could, for example, be inappropriate for another type.

As a guideline and notwithstanding other factors, one interpretation is that risk could be measured in terms of the numeraire of the Fund.

Article 15.8

Minister's Proposal	IAB Recommendation
None.	15.8 The Minister shall determine the period within which Investment Managers shall dispose of instruments if they cease to be eligible investments because of a change in the rating of the financial instruments or the issuer of the instruments.

Rationale

This proposed Article addresses the same issue as Article 15.2 of the current Petroleum Fund law:

"The investment Manager shall dispose of an instrument if it ceases to be a qualifying instrument because of a change in the rating of the instrument or the issuer of the instrument within one month of the instrument creasing to be a qualifying instrument"

The objective of the Article is to permit time for the disposal of investments that change in rating without causing the manager to be in breach of the law during that time.

The current law defines a disposal period of thirty days. While this period is a fair operational time, the requirement may have had negative impacts because of forced sales during times of severe market stress as has recently been the case, and during which a number of financial instruments have regained value following a sharp fall. For this reason, the Board believes that it may be inappropriate to retain the thirty day period during which investments may end up being sold at "fire sale" prices.

Accordingly it is proposed that the Minister, taking account of general economic and financial market conditions, may determine an appropriate disposal period from time to time. It is not intended that the Minister become involved in day-to-day operational issues by being required to determine the relevant time period on a case-by-case basis. According the use of the plural has been used with a view to the Minister having a policy rather than an operational role. It may be appropriate for the general period to be regulated in the Management Agreement with provision for specific exceptions to be granted on request of the BPA.

The possibility of giving the operational manager the ability to determine the disposal period was considered. In light of the fact that the period is specified in the current law, and to preserve a balance of powers, it was decided that on balance the authority to set the disposal period should rest with the Minister.