

“Understanding Sovereign Risk from Financial Statements”
TUESDAYS 9 AM-12.15 PM TERM A FALL 2019

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Course Description and Objectives

The post-crisis world is characterized by high levels of government debt. Sovereign risk stemming from Government debt is in the news frequently (e.g., Greek debt, Argentina’s default, emerging market debt). The market for sovereign bonds runs into trillions of dollars and is far larger than equity markets in several countries. Yet, it is highly suspect that sovereign risk, inherent in these bonds, is priced correctly.

A major driver of such mispricing is the lack of awareness of deficiencies in governments’ financial statements among bondholders, the rating agencies, and the citizenry. Only a small number of countries in the world (e.g., U.S., Canada, U.K., Israel, Switzerland, Austria, Australia, and New Zealand) actually report something close to accrual accounting, the standard in the corporate world, to reflect their assets and liabilities. Some governments, such as Austria and Switzerland, even leave out legally contracted public employees’ pensions from their financial statements. Many advanced countries, such as Japan and Germany, report results on a cash basis and more worrisome do not report consolidated financial statements. For instance, Japan reports a list of financial and non-financial assets and liabilities at different places on the websites of the Ministry of Finance and the Bank of Japan. Some governments, such as the Vatican and Abu Dhabi do not release any financial statements. In the absence of financial statements, stakeholders have little information related to how specific assets and liabilities are measured, whether the liabilities, especially contingencies and commitments are comprehensive, and what is the actual net debt owed by the Government.

When firms run into financial difficulties, the pressure to misreport obligations and spending goes up. These incentives work in the same way for governments. The financial crisis has created a mountain of government debt and consequent pressure to misrepresent such debt (Greece is a prime example). Unlike the corporate sector, one cannot rely on boards of directors or competent auditors or even short sellers to keep governments honest. Several finance ministries in the world are populated by officials who under emphasize the importance of reporting standards and of accounting measurement. Perhaps the sovereign bond market provides the only mechanism for enforcing accountability on government finances. As we will see in the course, even the ability of the bond market to enforce reporting transparency is limited.

In this class, you will learn how (i) to consider the fundamentals of governmental financial statements; and (ii) to exploit these fundamentals to make better investment decisions related to sovereign risk.

In particular, we will ask one simple question over and over again: “what would these governmental obligations, assets, spending and revenues look like if we applied accounting and measurement policies designed to provide a true and fair picture of economic reality as prescribed by U.S. GAAP (Generally Accepted Accounting Principles) and IFRS (International Financial Reporting System), or the IFRS public sector comparable IPSAS (International Public Sector Accounting Standards)?” GAAP and IFRS are the standard measurement and disclosure frameworks employed by corporate America and global companies. A systematic approach to answering these questions will lead to insights on (i) the glaring gulf between the stated and true economic obligations of governments; and (ii) a better appreciation for sovereign risk.

Adjunct Professor: Paul Kazarian is the CEO and founder of Japonica Partners (www.japonica.com) and the Charles & Agnes Kazarian Foundation (www.kazarianfoundation.org). During the 2013 Greek government-debt crisis, Paul became one of the largest investors in Greek government bonds, eventually offering a bond portfolio of €2.9 billion euros (approximately \$3.8 billion U.S. dollars). Paul has told me that an accounting insight initiated this Greek bond investment. He has often said that international standards for sovereign accounting are not used within the Eurozone. Instead, the EU opts for a legal framework meant for legal compliance rather than accountability and hence distorts the Eurozone's financial positions.

Paul will share his wealth of experience in the sovereign risk world with the class in sessions #1, #2, #5 and #6. Paul will spend around an hour usually in the second half of these classes, except for class #6 where we will start the class with a discussion of his investment in Greek bonds.

B 8024: Preliminary Course Outline		
Class #	Subject matter	Specific Topics
1: SEP 3	Overview - Approach to Fundamental Analysis of Government Financial Statements	<ul style="list-style-type: none"> • A general framework for understanding governmental balance sheets • The “Cycle of Life” of a governmental entity • Computing key metrics from governmental financial statements • IPSAS (equivalent of IFRS) relative to Govt statistics (IMF or Eurostat) <p>Paul will review Japonica’s PFM framework for assessing sovereign risk-reward</p>

<p>2: SEP 10</p>	<p>Institutional Background</p>	<ul style="list-style-type: none"> • How does the sovereign debt market work? • What do the rating agencies miss? • Shenanigans to get into the Euro zone • Impact of the Dec 2017 tax cut on U.S. deficit <p>Paul will discuss Japonica’s rating agency search findings. Vincent Truglia (former Moody’s sovereign bond head) invited to speak (see https://www.linkedin.com/in/vincenttruglia/).</p> <p><u>Assignment 1 due: Computing key metrics from Governmental financial statements or Eurostat or IMF statistics</u></p>
<p>3: SEP 17</p>	<p>Understanding Revenue</p> <p>Understanding Human Resources, Labor Costs and other expenses</p>	<p><u>Revenue:</u></p> <ul style="list-style-type: none"> • Understanding revenue • The revenue is collected from whom, how and where? • How are government services priced? • How is the revenue recognized in the books? • How and when are constituents paying? • Revenue fudges to reduce reported deficits <p><u>Labor costs and entitlements</u></p> <ul style="list-style-type: none"> • What type of human capital do you need to sustain the revenue, how many and where are they located? • How are(/should) they (be) compensated Cash vs Benefits (pensions and health/opeb)? • Where and how is the cost reflected in financial statements? • What are other primary expenditures? Where and how are these reflected in financial statements? • How are benefits and entitlements to citizens measured and reported?

		<p><u>Assignment 2 due: Critically evaluating the latest report of the rating agency following your country of choice.</u></p>
<p>4: SEP 24</p>	<p>Understanding Productive Capacity, Intangibles.</p>	<ul style="list-style-type: none"> • What property and equipment (including technology) does the Government need to sustain the revenue and/or grow (match to the revenue expectations)? • How much does this cost and how will it be financed? • Where and how are(/should) the physical and financing needs (be) reflected in the financial statements? • What intangible assets are needed, how are they “acquired” and paid for, and how are/should they be reported? • How do these all compare to competing countries? <p><u>Assignment 3 due: Understanding the quality and sustainability of the country’s revenue, labor costs, expenses and entitlements for a country</u></p>
<p>5: OCT 1</p>	<p>Funding, Capital Structure</p>	<ul style="list-style-type: none"> • What funding choices have governments made? • How much and when is funding needed? • How are these reflected in financial statements and performance measures? <p><u>Assignment 4 due: Understanding and critiquing productive capacity for a country</u></p> <p>Paul will share his experience with analyzing and managing government debt</p>
<p>6: OCT 8</p>	<p>Catch up and putting it all together</p>	<p>Paul will begin the class with his experience with the investment in Greek bonds</p> <ul style="list-style-type: none"> • Catch up • Bringing all the pieces together • The New Zealand model • Current hotspots for sovereign risk: China, Brazil, Italy, U.K., and Japan

		<ul style="list-style-type: none"> • Guest speaker: Franciscos Koutentakis (https://www.linkedin.com/in/franciscos-koutentakis-16136247/, Head of the Hellenic Parliamentary Budget Office) <p><u>Assignment 5 due: Understanding and critiquing liabilities reporting for a country</u></p>
		<p><u>Assignment 6 due: Final report due a week after class ends, OCT 15 11.59 pm</u></p> <p><u>GRADES DUE: OCT 17</u></p>

Sketches of classes

Class 1: Introduction to financial statements and measurement approaches employed by various national statistical agencies

- Introductory preliminaries and the basics of financial statements
- Aren't Governments different from private firms?
- Excessive focus on headline deficit numbers
- Highlight the international accounting bodies with different measurement standards
 - IPSAS/IFRS
 - System of National Accounts
 - European System of Accounts (ESA)
 - IMF Debt Sustainability Analysis (DSA) and GFSM
 - Lisbon Treaty Excessive Deficit Procedure (EDP)
- Define and clarify all terms and concepts used in future sessions:
 - GDP
 - GNP
 - GNI
 - T-accounts
 - Asset, Liability, Revenue Expense
 - Total Government Net Worth or Total Government Net Debts
 - Citizens' Wealth and Citizens' Wealth* (with an asterisk)
 - Value Created/Value Destroyed
 - Performance gap
- Budgets v/s financial statements
- Highlight shared principles of international reporting standards with specific examples
 - Time value of money
 - Opportunity cost
 - Arm's length market values and rates
 - Do numbers reflect economic reality
 - Are they comparable over time and across countries?

- Highlight how simple KPIs (key performance indicators) can potentially change management behavior
- Compute KPIs such as (1A) Citizens' Wealth, (1B) Citizens' Wealth changes over time, (2) Citizens' Wealth*- with the asterisk, which uses net debt when government financial statements are not available, (3) Total Government Net Worth or Total Government Net Debts and changes over time, (4) ROA, and (5) Value Created or Destroyed. Other ratios include: Total Government Net Worth or Total Government Net Debts/GNI or GDP, GDP change/debt change, net debt/GDP, and GNI/GDP.
- Execute computation for three sets of countries: (i) best in class (NZ); (ii) intermediate case (UK); (iii) worst in class (bottom five Eurozone countries)

Class 2: Institutional background

- Reconciling IPSAS to Government Stats
 - Different objectives
 - Differences in reported entity, recognition criteria, valuation basis, revaluations, depreciation
- What do ratings agencies miss w.r.t sovereign risk and financial statements?
 - Highlight what rating frameworks currently cover
 - Highlight how the major rating agencies appear to under-emphasize quality of financial reporting
 - Ratings before major defaults were slightly below investment grade!
 - Proposed strategy to fix the problem
- Institutional facts about sovereign debt markets
 - Sovereign bonds protect creditors less than U.S. munis
 - What keeps sovereigns honest?
 - History of restructuring sovereign debt
 - Limits of Collective Action Clauses
 - How big are sovereign debt markets?
 - What is the maturity of sovereign debt?
 - Standard clauses in sovereign debt contracts
 - Facts on sovereign default
- Shenanigans to get into the Eurozone
- Guest lecture

Class 3, part 1: Understanding and critiquing revenue streams for a country

- In the U.S. context and to some extent for the U.K.
 - Where does the revenue come from?
 - Contrasting tax accrual revenue relative to cash collected used in the budget
 - Decomposing revenue into quantity and price (tax payers and tax rate)
 - Is there room to raise taxes?

- The IRS' tax gap
- 27% of accounts receivable and 75% of tax receivable on the U.S. balance sheet are doubtful
- Student loans and loan guarantees are the biggest asset on the U.S. balance sheet and subject to valuation fudges
- Revenue shenanigans in the U.S. and in the E.U.
 - One-time cash infusion via sale of assets
 - Questions about the value of assets sold
 - Sale leasebacks
 - Tobacco settlement securitization
 - Misuse of sale proceeds
 - Wasting windfalls
 - Privatizations booked as revenue

Class 3, part 2: Understanding and critiquing labor costs and entitlements for a country

- Understanding the components of Labor and Entitlement costs, how they are reported
 - Govt personnel costs and citizen entitlements conflated in the U.S. unlike NZ
- Economic versus accounting for some of the Larger Components
- Post-employment benefits: pensions and healthcare
 - Private sector standards for pension and health care accounting not followed in the U.S. Govt. books
 - Pension deficits are a huge headache at the state and local level in the U.S.
 - Accounting for Medicare and the HI Trust Fund
 - Off balance sheet related to social security and Medicare/Medicaid is around \$60 trillion for the U.S.
- A few comments on the three big arms of the U.S. Govt
 - Department of Health and Human Services
 - Department of Defense
 - Several internal control weaknesses
 - Social Security Administration
 - Austria and Switzerland leave their benefits off balance sheet too

Class 4: Understanding the country's assets

- Does the government's definition of an asset include economic control?
- What are the physical resources the U.S. Govt has invested in?
 - PPE
 - Investment in Government Sponsored Enterprises
 - Freddie and Fannie's balance sheets not consolidated into the U.S.'s books
 - Freddie's debt to equity ratio is 400 and Fannie's is 550

- What if we see a 20% decline in housing prices?
 - Federal Deposit Insurance Corporation (FDIC) not consolidated
 - Pension Benefit Guarantee Corporation (PBGC) not consolidated
 - The notional value of loan guarantees is \$1.8 trillion
 - Stewardship and heritage assets
 - Potentially repurposing federal real estate and buildings
- Highlight shenanigans that countries employ in reporting of assets with examples
 - Financial assets
 - Bank sector recapitalizations
 - Impairment of financial assets
 - Temporary designations hiding financial transactions
- Non-financial assets
 - Asset sale v/s reinvestment decisions
 - Fixed asset deterioration
 - Leasing v/s buying
 - Public-private partnerships
 - Revenue and expense recognition on long-life agreements
 - Delayed payments on defense purchases
 - Hidden SOE (state owned enterprises) burden and risk
 - Double digit % losses in Account Receivables
 - Unusually long depreciable lives
 - Ignoring accountability in infrastructure assets
 - Asset impairment reviews
 - Disclosing real estate basis on the balance sheet

Class 5: Understanding and critiquing reporting of liabilities for a country

- Distinction between gross and net debt
- Understanding budget deficits and links to income and cash flow statement
- Understanding the liabilities on the U.S. balance sheet
 - Debt owed and on the balance sheet
 - Where is the debt headed?
 - Impact of delaying entitlement reform on debt
- Debt ceiling shenanigans
- Greek debt overstated to extract concessions from EU and Greek public
 - What if Greece's debt were correctly calculated?
 - Highlight how restructured debt was accounted for
 - Facts on Greek Government financial stability and sustainability
 - Managing the Greek Government's balance sheet
- Highlight shenanigans that countries employ in reporting of liabilities with examples
 - Financial liabilities
 - Concessional loans
 - Debt buybacks

- Exclusion of debt for specific purposes
- Derivatives ignored
- Non-financial liabilities
 - Environmental liabilities bailouts
 - Litigation exposure
 - Private pension debt excluded
 - SOE debt excluded
 - Contingent liabilities

Class 6: Wrap up

- New Zealand as a best in class exemplar
- Hotspots in sovereign risk: Italy, China, U.K., Japan and Brazil
- Guest lecture

Graded Learning

The only way you will internalize the information in the course is by actually reviewing and commenting on the financials or the financial statement of a country.

In the **assignments**, you will be asked to analyze key aspects (e.g., revenue, labor, etc.) of a country of your choosing (following the framework provided in the class) on an individual basis. However, feel free to talk with each other or with others to help you maximize your learning.

At the end of the class, the deliverable is a **final project for your chosen country**. Details can be found in the assignment memos attached to the syllabus. Ideally the country you choose to analyze will be one that you are interested in understanding deeply.

The grades will be based on your engagement in the class, the assignments, and the final deliverable but we have **no exams**.

Final project of your chosen country:

In general, students are free to choose any country for analysis with the BIG CAVEAT that not all countries report financial statements. If you are interested in a country without financial statements, you will have an intellectually rich and but also a difficult journey into recreating some of the financial statements from supplementary sources.

We recommend that you choose one of the following four countries for whom financial statements are available: (i) European Union; (ii) Australia; (iii) New Zealand; or (iv) U.K. The U.S. also produces financial statements but we heavily use U.S. disclosures in the class. Hence, we would rather not have you use U.S. for your project.

If you are set on working on emerging markets, the following four countries are potential hotspots worth studying: (i) Argentina; (ii) Brazil; (iii) China; and (iv) Venezuela.

What you will get out of this

Every student **who puts in effort** should walk away with an approach and concepts that you can use in almost any country. It is usually a fun and stimulating journey for students. At the same time, I want to emphasize that a “30,000” foot perspective does not work in this class. This is a detail-heavy intense experience.

Is financial expertise critical?

The course presumes that you have a solid understanding of the subject matter covered in B6013 and other core courses. We have had many students in the past in similar classes without additional financial accounting or finance backgrounds, and by investing in their learning, they end up with H or even H+ grades. So, while financial analysis expertise may be helpful it is not necessary at all.

High quality investment decisions in the real world are grounded in a lot of detail about the sustainability of the country's finances. Without careful analysis, we cannot hope to ferret out price moving information that the market has overlooked. Following that objective, this is a detail-heavy class that gets deep into financial and non-financial data to assess the country.

Required Text and Readings

1. Weekly handouts/posts on Canvas substitute for a course packet
2. There is no required text because there is no real textbook for sovereign reporting. Some of you usually ask for texts you can refer to (these are references for students who need the comfort of looking back at a text for more the basic/intermediate level concepts. PLEASE NOTE THESE BOOKS ARE MEANT FOR CORPORATE ACCOUNTING. THEY DO NOT COVER SOVEREIGN REPORTING PER SE):

Basic book Financial and Managerial Accounting for MBAs Hardcover – 2014 by Peter D. Easton, Robert F. Halsey, Mary Lea McAnally, Al L. Hartgraves, and Wayne J. Morse. An older edition is fine.

Intermediate book: Financial Reporting and Analysis, 5th Edition 5th Edition by Lawrence Revsine, Daniel W. Collins, W. Bruce Johnson and H. Fred Mittelstaedt. An older edition works just fine.

3. There will also be additional references provided for those students who want to get more background and a deeper understanding of some of the technical accounting aspects of any topic, but this is **not required**. I am more interested in the willingness to learn and less in prior technical accounting backgrounds. Some of my best students in the past have surprisingly have had nothing more than introductory accounting. But they probably worked the hardest they ever had on this course.

Grading

You have two sets of deliverables with different grading components as follows:

1. There will be approximately six other written assignments during the semester. All these assignments relate to the understanding and forecasting of the specific line items on the income statement and balance sheet for an actual company of your choosing. These assignments will be done by you using the Type B assignment scheme (see below) and cover 50% of the grade. In particular, the first five assignments cover 45% of the grade whereas the sixth one is allocated 5% of the final grade.
2. The remaining 50% of your grade will be based on FIVE short in-class quizzes based on the material covered in previous classes, your attendance at class in general and my perception of your preparation and understanding of the class.

How are the five weekly assignments graded?

TAs grade each assignment looking for whether or not the team has satisfactorily covered the checklist we assign for evaluating every important line item on the financial statements: revenue, labor and entitlement costs, assets and liabilities.

Seeking Alpha

In the past, students in my other classes with outstanding project reports have had their case for shorting or longing a stock (here country) accepted for publication at the website "Seeking Alpha" <http://seekingalpha.com/>. I encourage you to shoot for such a publication at the end of the class. Well written and well analyzed articles get thousands of page views in Seeking Alpha and might represent a credible way to get noticed in the analysis world.

Audits

I do not encourage auditing/observing the class. The only way you learn the material is by actually working through the assignments and quizzes.

TA

The TA for the class is Quinn Wang (KWang21@gsb.columbia.edu).

You can communicate with Quinn via email to discuss the course and assignments. **You should also copy me on all correspondence.**

Office Hours: By appointment

Relation to the Core:

This course incorporates elements of every core class.

This course adheres to the Columbia Core Culture. Students are expected to be:

Present:

- On time and present for every session
- Attendance tracked

Prepared:

- Complete pre-work needed, expect cold calls
- Bring nameplates and clickers

Participating:

- Constructive participation expected and part of grade
- No electronic devices unless explicitly called for by the instructor (look under “tablets/computers” below)

Code of Conduct: aka our Contract

The value of the course will depend on how much effort you are willing to put in, and on attendance and participation in the lectures and assignments.

You are expected to treat the class as you would your job, i.e., as a business professional, demonstrating mutual respect for each other, and performing as if it is an important business assignment. This means you need to be prepared, be on time, and be attentive during the class.

Tablets/Computers: I am open to letting you use these for access to the class materials or to take notes. BUT if this is abused for personal activities and distracts other students, I will change the policy.

Cellphones: All classes in this course have a ‘no cellphone’ policy. In respect to your fellow classmates and myself, please have your phone’s volume and vibration turned off during class and keep your phone in your bag/pocket. We will have one break (10 to 15 minutes) when you can catch up on calls, emails, etc.

If you need to be reachable immediately during class (e.g. your wife is going into labor any minute), please let me know ahead of time.

My commitment to you:

I will give you as much personal attention as feasible to maximize the benefit from your work. A sign-up sheet with tentative meeting times will be put out on the first day of class. You are expected to meet with me at least once during the half semester to talk about your final project. As people come in with different expertise, we can (partially) tailor the output to your strengths and expertise. I appreciate constructive feedback during the course to help optimize your learning, but I have to consider the class as a whole, so individual needs are best dealt with by me or Quinn one-on-one.

Type	Designation	Discussion of Concepts	Preparation of Submission	Grade
B	Group/Individual	Permitted with designated group*	Individually (No sharing of any portion of the submission.)	Individual

*The designated group is a self-selected study group to be used for the duration of the course.