Question 1 (20%) – 12 points

Question 1 (20%) What types of risks do environmental sustainability risks (including climate change) pose to the international financial system? In your view, should international regulators incorporate environmental risks into financial regulation? Which international regulatory standards (if any) are appropriate for addressing environmental risks?

Introduction – summary of essay about whether international regulation should address environmental sustainability risks and which international regulatory standards are relevant for addressing environmental sustainability risks.	.5
Environmental sustainability risks pose three types of risks to financial markets: 1) physical risks (external environmental impacts on economy/society; 2) Transition risks – governmental policy and/or regulatory changes creates market impact by contributing to asset price changes that could be volatile and abrupt, rather than smooth and managed. Legal risks are the liability risks that firms/institutions have because of greater environmental physical risks (ie., insurance claims) and related lawsuits and regulatory liability (ie., lender liability) to compensate customers who suffer losses. Discuss pros and cons of incorporating environmental risks into financial regulation. On the one hand, important to address climate-related financial risks; on the other hand, new regulations might create incentives for green washing and that environmental risks may not be related directly to financial risks	1 1 1 1 1
Extra credit if discusses Basel II addressed environmental risks in pillar 1, which has been left in Basel III, regarding potential lender liability risks for collateral which may loss value because of environmental phenomenon (ie., flooding).	**1**
Post-2008 crisis international reforms emphasised importance of macro-prudential financial risks that derive from inter-connectedness of financial system and broader economy. International regulatory reforms could address financial stability with a focus on the banking system, Basel Accords which set capital and liquidity and corporate governance standards for banks could be adjusted by having changes to risk-based weights for calculating capital to reflect increased stability of environmentally sustainable loans. And Financial Stability Board's focus on disclosure	1.5

by corporates could apply to banks and other financial institutions to disclose their financial/environmental risks.	1
IOSCO standards could apply to the sale of financial products that contain whether or not they are used for investing in green/sustainable activities. Investor protection and customer safeguards for purchase of such products.	1
Market misrepresentation/manipulation standards could apply to green-washing.	.5
Discussion of what international institution – FSB, Basle Committee or IOSCO or IMF – who should take the lead and coordinate on developing international financial standards for sustainability risks.	1
Sustainability Banking Network – banking sector-central bank/regulator group	1
Brief Opinion (pro or con) whether international standards should address sustainability risks. Involves analysing the question.	1-2
TOTAL Question 1 (excluding extra credit)	**12**

Question 2 (30%) – 18 points

State A's regulators requested that SB Bank comply fully with international standards.

1. SB Bank's Board has asked you to advise it regarding whether SB Bank's subsidiary bank in State C should comply with State A's 100% risk-weighting requirement for bitcoin and crypto assets, or should it apply the 20% risk-weighting required by State C's regulator?

2. The Board has asked you to advise it on whether the bank resolution standards in State C (discussed above) comply with international standards?

3. State A's and State C's regulators have asked you to advise them on whether there are any ways or procedures on cross-border coordination that the regulators and resolution authorities in both states could undertake to resolve or reduce the negative effect of any contradictory or inconsistent regulatory requirements?

4. Do you think that State C's adoption of less stringent regulatory requirements would undermine any international principles of financial regulation discussed in this course? If so, which ones.

Question 1. Introduction – International banking regulation standards apply to countries where international banks operate. The Basel Accord, Basel Concordat and Core Principles of Banking Supervision would be applicable to SB Bank. However, these standards are soft law (not legally binding) and nations are free to adopt modified versions of the standards into domestic law/regulation. The states with regulatory jurisdiction over SB Bank's operations in the question are states A and C.	.5
1) The Basel Concordat contains the principle of home country control for prudential supervision of the cross-border operation of banks, yet respect host country supervisory oversight of a foreign-owned subsidiaries operations in the host jurisdiction. The home-host authorities are expected to coordinate and agree standards for the host country subsidiary. Host country authority however legally competent not to recognise the bank's home country supervisor's decision regarding prudential matters. The decision to impose 20% risk-weighting is a prudential decision that the host can make without agreement of the home country. But the institution is put in a very constrained position because the home country authority may still insist that global operations are subject to its stand-	1 1

ards. But the host can ultimately withdraw the license for the local host subsidiary if it does not comply with host rules. It would be a conflict of legal obligations between two jurisdictions.	**.5**
Extra credit – for further discussion of home-host issue that emphasises that SB bank operates in several jurisdictions where regulators will take different views. The view of the regulator of the home country where the group is headquartered will be performed but with a global bank home country supervisor must coordinate through college of supervisors and consult host country authorities. Basel Concordat should be cited along with FSB requirement for colleges of supervisors	**1-2**
2) Discuss the FSB international resolution standards which are soft law. The TLAC requirements and the requirement for the use of resolution tools (soft law): four tools. Bail-in the most prominent tool. Asset separation another tool between bad bank and private purchaser, bridge bank a tool for temporary oversight of the ailing bank.	1-2
International standards for Total Loss-Absorbent Capital (TLAC) of 20-22% of risk-based capital foe systemically important financial institutions, and 16-18% of risk-based capital for non-systemic institutions.	1
Important question of how the bank board of directors will decide what is their fiduciary duty: to the interests of SB Bank's operations in state A or must they also take into account the interest of SB bank subsidiary operation in state C (with less strict regulatory/resolution requirements). Should the bank board of SB Bank in state A consider the benefits of less strict regulations in state C, or do the less strict regulations in state C put SB Bank at undue risk because not up to conformity with international standards	1-2

3) State A applies international minimum TLAC standard whilst state C applies a 1
lower 12% TLAC standard. State applies SPE, whilst state C applies MPE.
They have legal competence to apply different resolution standards, but the **1-2**
cross-border operations of the bank would subject it to conflict demands of the
resolution law of state and state C. To resolve this difference, state A and C 1
should have regard to Key attributes 8 and 9, which provide respectively for a
legal basis to enforce cooperation between regulators where a cross-border bank
operates. KA 8 provide home-host principle of resolution oversight that would
involve creation of a crisis management group (CMG). KA 9 provides that for
each SB (like SB Banking Group) that they agree to a bilateral or multilateral
agreement in order to allocate responsibilities and work out operational elements
such as sharing information between resolution authorities and adopting an ap- 1
propriate standard (ie., TLAC standard) and agreement regarding use of resolu-
tion tools, such as bail-in tools.

Financial Stability Board possible naming and shaming jurisdictions. 1

Extra credit – mention at least 2 other resolution principles (attributes) in addition to KA 8 & 9.

4) State C’s adoption of less stringent requirements undermines Basel Accord’s 1-2
focus on comparability of regulatory standards and minimum international
standards. Basel I’s minimum standards for internationally active banks. Basel
III.5 now emphasises comparability between risk-weightings of banks and that
regulators not adopt significantly different standards

Basel Core Principles for Effective Banking Supervision have minimum prin-
ciples (principle 6) of adequate capital to reflect the risks that the bank under- 2
takes. This principle possibly breached by state C adopting low risk-
weighting rule (20%) for crypto assets.
Also, Concordat’s principle of home-host coordination at risk if state c pur-
sues different regulatory approach without consultation and forming a com- 1
mittee or college of supervisors/resolution authorities to assess what SB Bank
should be conforming to in its global operations.

Extra credit - Does the regulator's stricter oversight under Pillar 2 provide adequate safeguards that SB Bank will make a prudent decision regarding whether to pay dividends. Analyse pros and cons	1-2
TOTAL Question 2 (excluding extra credit)	**18**

<u>Question 3 – (30%) – 18 points</u>

John Dillinger is an ambitious entrepreneur who wants to launch his new project TechWillSaveTheWorld, a tech company engaged in producing innovative technology for sustainable purposes.

John Dillinger heard about new developments in entrepreneurial finance, in particular the emergence of Initial Coin Offerings (ICOs) and their evolution as an alternative to traditional Initial Public Offerings (IPOs).

John Dillinger is tempted by this alternative tool for financing his venture.

- Please explain the advantages and disadvantages of the two options, taking into account (but not limited to) the risks for investors and the financial system, the potential costs related to disclosure. Please state what you would suggest, if you were Mr. Dillinger's advisor.

Depending on the risk profile of the entrepreneur, and the approach of a lawyer as an adviser, both options – IPOs and ICOs – are viable.	2
IPOs are costly but more regulated, and rely on established gatekeepers. ICOs are less regulated, and expose both the issuer and the investors to higher risks: issuers are exposed to regulatory uncertainty and potential enforcement of securities agencies.	1-2
Initial Public Offering are part of the primary market.	Extra 1
Primary markets may be much riskier than secondary markets. While secondary markets rely on price-mechanisms incorporating the relevant information, primary markets in principle expose retail investors and the financial system to higher information asymmetries, and need to rely on the role of gatekeepers in order to function in an efficient manner, thereby protecting investors.	1 2
Primary markets have traditionally been comprised of three main segments. The most important one is the Initial Public Offering (IPO) market – together with captive markets and 'fringe' direct offerings markets - , where issuers retain underwriters to place their securities with retail as well as institutional investors and list the securities on an exchange.	1
ICOs may be considered a new segment within the primary markets.	Extra - 1
ICOs emerged as a new tool for entrepreneurial finance in 2017, and underwent significant transformations in the last years, especially after the wave of scams emerging in the markets between 2017 and 2018.	2

Differently from IPOs, where companies sell stocks via regulated exchange platforms, ICOs sell digital coupons, so-called "software presale tokens", to early investors via non-regulated exchange platforms. The issuance of tokens occurs through an indelible distributed ledger in the form of an organization's cryptocurrency created on a protocol, and they can be purchased online with fiat currency or another digital currency at a predetermined exchange rate. Differently from common stocks available in an IPO, tokens do not generally confer ownership rights. Instead of the ownership right itself, a token offers a discounts on cryptocurrency before they hit the exchanges once the ICO is launched (this may be an argument in support of the impossibility to define them as "securities"), and, together with the stake in the company, a right to vote on future decisions. Nowadays the most popular forms of ICOs are Security Tokens Offerings (STOs) and Initial Exchange Offerings (IEOs). They are both more regulated than traditional ICOs, and in the case of IEOs cryptoexchanges operate as gatekeepers.	1 1 2 1
An advantage of IPOs as opposed to ICOs is the presence of established gatekeepers – in particular investment banks.	Extra 1
IPOs rely on the presence of stronger gatekeepers. Gatekeepers are a group of intermediaries, operating between the investor and the issuer, providing investors with certification or verification services via the reputational capital model. Because of their role (and position) as intermediaries between the investor and the issuer, gatekeepers mitigate the problem of asymmetric information and other market failures. Investments banks acting as a gatekeeper set the price for the issuer of securities on the primary market.	2-3
IEOs try to mitigate the risks that emerged in traditional ICO schemes, by relying on 'reputed' cryptoexchanges acting as gatekeepers.	
IPOs are extremely expensive, mostly because of compliance costs emerging from securities regulation. This difference still persists even in comparison to	Extra 1

the more regulated models of ICOs – IEOs and STOs. In many jurisdictions, securities regulators did not set established standards for the application of existing securities law frameworks to ICOs. ICO issuers might be exposed to enforcement initiatives of securities agencies, as in the case of the American Securities & Exchange Commission (SEC).	2-3
The more regulated environment of IPOs compared to ICOs bring more certainty, and is a stronger signal to the market. At the same time, an ICO could potentially expose the issuer to the uncertainty of securities agencies' enforcement activities. In many jurisdictions, regulators characterized ICO digital tokens as securities, and extended securities laws to any entity involved with the ICO tokens.	2-3
Because of this more regulated framework, IPOs would likely give more certainty to investors, and in principle implement higher levels of investor protection.	1
TOTAL CREDITS Question 3	18

4. (20%)(2 sub-questions: 10% each).

If John Dillinger opted for an IPO, he would have to hire an investment bank providing specific services and supporting him in the process.

- (i) Please explain what would be the role of an investment bank in this context, and adopting a broader perspective why this is vital for financial markets.

If TechWillSaveTheWorld was listed on the StockExchange, it would be subject to mandatory disclosure rules.

- (ii) Please explain what is the role of mandatory disclosure in capital markets, highlighting its limits and potential alternatives that regulators might want to consider.

The term "gatekeeper" has changed throughout the time. It first identified a group of independent professionals who may be able to prevent issuer wrongdoing by withholding necessary cooperation or consent, thereby controlling access to the capital markets. More recently the term 'gatekeeper' has been used in a slightly different sense, to encompass those professionals who can provide investors with protection because of their certification or verification services. According to this preferred definition, intermediaries will be regarded as gatekeepers if they have significant reputational capital that they can pledge in order to verify or certify information produced by an issuer. Investment bankers, auditors, securities analysts are all examples of gatekeepers.	1 .5 .5
Underwriters (typically investment banks) can perform this certification and verification role for a company issuing securities for the first time. Absent the ability of insiders to communicate credibly their beliefs, or the ability of outsiders to buy inside information, investors will tend to discount the value of the information they receive from the issuer, leading to potential market failure. Using the underwriter as a reputational intermediary can solve this problem. The investment bank represents to the market that it has evaluated the issuer's product in good faith, and that it is prepared to stake its reputation on the value of the security. Effectively, an underwriter can be employed to 'certify' that the issue price is consistent with inside information about the future earnings prospects of the firm.	1 1 Extra - 1 .5

Investments banks acting as gatekeepers set the price for the issuer of securities on the primary market. Investment banks are in the position to analyze all the available information as well as originate new data. This non-disclosed informational asset is functional to set a reliable market price before the standard information-aggregation mechanism (that is secondary trading) has begun.	1
Assuming that John Dillinger's corporations has no reputation, it needs to rely on an established financial institution to "certify" and "verify" the securities to be issued. In doing this, investment banks put at stake its reputation on the value of the security.	1
Disclosure is a technique of the utmost relevance in financial market regulation, and it plays a key role in many different contexts. Anyone offering securities to the public and/or listing them on a stock exchange has to provide a wealth of information before doing so, and remains subject to disclosure obligations so long as the securities are held by the public or listed.	.5 .5
For transparency purposes, significant long (and, since after the crisis, short) positions in listed shares have to be disclosed to the public. Anyone launching a takeover bid for a listed company's shares has to provide ample information about himself, his intentions, plans, and so forth.	1
Any financial services contract between a consumer and a bank or investment firm is to be preceded by lengthy disclosures and rules are usually in place to ensure that the client is informed about its ongoing relationship with the financial intermediary.	.5 .5
The core function of MD in financial market regulation is to provide economic agents with information to help them make better decisions. Its rationale, in turn, is grounded on the belief that in the absence of MD there would be less information available for such choices than it would be optimal or (which is largely the same) that higher production and dissemination costs would lead to its undersupply.	1

Disclosure in financial markets pursues three objectives: (a) it strengthens investor protection, indirectly preserving the well-functioning and the growth of securities markets; (b) it mitigates agency problems affecting large corporations, (c) it ensures price accuracy. This section should discuss such core objectives. In this deal (and more generally in the IPO market), the role of an investment bank is more important than other protection mechanisms, in particular the issuer's duty to publish a prospectus as a form of mandatory disclosure to protect investors. Non-sophisticated investors are reticent to read prospectuses, and therefore they free-ride on the efforts of investment banks to set the price of John Dillinger venture's stocks.	.5 .5 1
TOTAL QUESTION 4	12