U.S. and China Corporate Tax Implications for Pillar 2 Adoption

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Xiaoli Ortega is an associate professor of accounting at the Woodbury School of Business at Utah Valley University in Orem.

In this article, Ortega analyzes and compares the corporate income tax structure and governmental incentives for U.S. and Chinese corporations. She identifies key differences between the countries' corporate income tax structures and their implications for U.S. and Chinese economic and political goals, as well as the implementation of pillar 2.

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Introduction

With globalization and international competition, governments' corporate tax policies have increasingly become a focus area because of their potential to affect a country's competitiveness in the global marketplace. The United States has one of the highest effective tax rates in the world, as well as the world's largest economy. As the world's second-largest economy, China also attracts significant attention from global multinational enterprises.

This article summarizes the tax burdens and governmental incentives for U.S. and Chinese corporations to look at the competition between the world's two largest economies. It identifies key differences in their corporate income tax structures and the implications for U.S. and Chinese economic and political goals.

For example, high U.S. corporate tax rates may discourage foreign direct investment (FDI), while China's preferential rates for specific sectors may lead to uneven economic development. This article provides insight into how tax policies affect the financial performance of China and the United States, shedding light on government policymaking decisions. While tax reform is constantly being discussed in the United States, including efforts in both the executive and legislative branches, China has been implementing a renewed set of corporate tax policies and new, more efficient tax systems to retain and attract FDI.

Corporate income tax incentives play a pivotal role in shaping the economic landscape of the United States and China. They influence corporate behavior, investment decisions, and overall economic growth. In the United States, tax reforms have been designed to stimulate innovation and attract FDI. For example, reducing corporate tax rates is a way to improve the investment environment's attractiveness, encouraging firms to invest in research and development and to make capital expenditures.¹ This aligns with findings

that tax incentives can affect corporate financial performance and innovation, demonstrating the practical implications of tax policies.²

The Chinese government has also implemented tax incentives, mainly targeting high-tech enterprises and FDI. Revisions made to the Enterprise Income Tax Law in 2017 allowed for the carryforward of corporate donations, which has been shown to positively influence corporate behavior.³ Also, tax incentives in China are often linked to broader industrial policies that foster innovation and economic growth. For example, R&D-related tax cuts have catalyzed innovation, and the potential for future tax benefits has created incentives for further technological advancement.⁴

Overview of U.S. and China Corporate Tax

Corporate income taxes in the United States and China reflect each country's distinct economic environment and policy objectives. Understanding these differences is important in the context of international tax reforms such as the OECD's pillar 2 initiative, which aims to establish a global minimum tax rate to address tax base erosion and profit shifting.⁵

The Tax Cuts and Jobs Act significantly restructured the U.S. corporate tax landscape. The federal corporate rate was reduced from 35 percent to 21 percent to enhance U.S. corporations' competitiveness globally and encourage domestic investment. The reduction was complemented by provisions allowing immediate expensing of capital investments, encouraging firms to invest in new equipment and technology. The U.S. tax system also includes credits and deductions for R&D, designed to spur innovation by reducing the tax burden on companies engaged in R&D activities. These have been shown to positively influence corporate behavior, leading to increased investment and job creation.

Conversely, China's corporate tax structure is characterized by a statutory rate of 25 percent, with preferential rates for specific sectors and regions, mainly for high-tech enterprises and FDI. The Chinese government has implemented tax incentives to promote economic development, technological advancement, and environmental sustainability. For example, the Environmental Protection Tax Law introduced tax incentives for companies that engage in environmentally friendly practices. Further, the Chinese tax system allows significant local government discretion in setting tax rates to attract foreign investment. This decentralized approach has resulted in a complex web of tax incentives that vary significantly across regions and industries.⁷

Comparison of Tax Incentives and Loss Deductions

The U.S. and China offer various corporate income tax incentives, each reflecting different economic goals, policy focuses, and regional development strategies. Below is a detailed comparison of the two countries' critical corporate tax incentives.

Tax Rate Structure

- The U.S. corporate tax structure includes:
 - A federal corporate rate of 21 percent following the passage of the TCJA in 2017, a rate lower than China's statutory rate of 25 percent.⁸
 - Companies may face state corporate income taxes, which vary between 3
 and 12 percent depending on the state, adding to the overall tax burden.
- The Chinese corporate tax structure includes:
 - A statutory 25 percent corporate rate. However, some companies, for example high-tech enterprises and small and microenterprises, benefit from a lower tax rate, often as low as 15 percent.⁹

R&D Tax Incentives

- United States:
 - The U.S. corporate tax features the section 41 credit for increasing research activities, which allows businesses to receive a tax credit for qualified research expenditures. Unlike a deduction, the credit directly reduces the tax liability.¹⁰
 - The TCJA's reinforcement of the R&D tax credit's permanency provides long-term certainty for businesses investing in innovation.¹¹

• China:

 China offers a "superdeduction" for R&D expenses. Manufacturing enterprises have a 100 percent superdeduction (meaning the corporation can deduct 200 percent of the R&D costs). Other industries get a 75 percent deduction. This policy encourages innovation and technological development.¹²

Small and Microenterprise Incentives

• United States:

 While the United States does not have a small business corporate tax rate, small businesses can be structured as passthrough entities (partnerships, S corporations, or sole proprietorships) to avoid double taxation and pay individual income tax rates, which can be lower. The United States also offers tax credits for small businesses.¹³

• China:

 China offers preferential rates for small and microenterprises. Eligible small enterprises pay 12.5 percent on taxable income up to CNY 1 million (about \$141,000) and 20 percent for income between CNY 1 million and CNY 3 million.¹⁴

Regional Incentives

United States:

 The United States does not offer national or regional tax incentives but encourages investment in economically distressed areas through
 Opportunity Zones. Investors in these areas can defer or reduce capital gains taxes, making it an attractive option for long-term investment in lowincome communities.

• China:

 China provides regional tax incentives, such as the Western Development Program, to stimulate development in less-developed areas. Enterprises in these regions can benefit from a 15 percent corporate income tax rate, significantly lower than the standard 25 percent rate. This encourages investment in western and rural areas.¹⁵

Green Energy and Environmental Tax Incentives

• United States:

 The United States has robust tax credits for renewable energy projects, such as the investment tax credit and the production tax credit. These credits directly lower tax liabilities for investments in solar, wind, geothermal, and other renewable energy sources.¹⁶

• China:

 China supports environmental protection and energy-saving projects by offering a three-year tax exemption followed by a three-year 50 percent reduction in corporate income tax. This applies to projects in renewable energy, pollution control, and resource conservation.¹⁷

High-Tech and Special Industry Incentives

United States:

 The United States does not provide specific corporate tax reductions for high-tech or specific industries at the federal level, but R&D tax credits are widely available. Also, some states offer sector-specific incentives for manufacturing, technology, and pharmaceuticals.

• China:

 High-tech enterprises in China benefit from a 15 percent corporate tax rate. Also, sectors like integrated circuits and software enjoy special incentives like tax exemptions for the first two years and 50 percent reductions for the next three years.¹⁸

Tax Deferral and Corporate Restructuring

• United States:

 U.S. tax law allows for deferred tax treatment in mergers and acquisitions, permitting companies to defer taxes on capital gains when certain conditions are met. This promotes capital movement and corporate restructuring.

China:

 China allows tax deferral for corporate mergers, acquisitions, and restructurings. Companies can postpone paying taxes on certain gains, easing the tax burden during restructuring.

Foreign Investment Tax Incentives

• United States:

 The United States does not provide specific federal tax incentives for foreign investment. However, state-level incentives exist for foreign companies investing in particular regions or sectors, often in the form of tax credits or exemptions.

• China:

 China offers tax incentives to foreign-invested enterprises, particularly in sectors like high tech, environmental protection, and energy conservation.
 In regions like western China, foreign companies can receive the same tax incentives as domestic firms.

Capital Gains and Dividend Taxation

United States:

 Capital gains and dividend income are taxed at lower rates in the United States than ordinary income. Long-term capital gains (assets held for over a year) are taxed at 15 percent or 20 percent, depending on income levels. The United States also offers capital gains deferral through Opportunity Zone investments.

• China:

 China offers preferential treatment for capital gains and dividends in specific cross-border investment scenarios, especially under tax treaties.
 This helps reduce the tax burden on international investors and corporations.

Loss Carryforward Period

• United States:

Net operating losses can be carried forward indefinitely under the TCJA.
 However, NOLs can only offset 80 percent of taxable income in each future

year.

- Before the TCJA, the carryforward period was 20 years, but the law changed to allow indefinite carryforwards to offer companies flexibility in long-term planning.
- Historically, U.S. companies could also carry back losses for up to two
 years to recover taxes paid in profitable years, but this provision was
 eliminated under the TCJA. However, COVID-19 relief measures (through
 the Coronavirus Aid, Relief, and Economic Security Act in 2020) temporarily
 reinstated the carryback provision for losses incurred in 2018, 2019, and
 2020, allowing losses to be carried back for up to five years.

• China:

- In China, NOLs can be carried forward for up to five years. If a company incurs a loss in a particular tax year, it can use it to offset taxable income in the following five tax years. This is a relatively short period compared to other countries.
- The carryforward period can be extended to 10 years for companies in particular industries, such as high-tech enterprises or environmental protection sectors. This extension supports industries that may have longer cycles of R&D before eventual profitability.¹⁹

Loss Carryback

• United States:

 As noted earlier, the United States eliminated the carryback provision under the TCJA, but it has been temporarily reinstated through the CARES Act for the tax years 2018, 2019, and 2020. Under this provision, companies can carry losses for up to five years, providing immediate tax relief for taxes paid in prior profitable years.

• China:

 China does not allow loss carrybacks. Companies can only apply losses to future tax years and cannot reclaim taxes paid in prior profitable years.
 This limits the immediate cash flow benefits that companies might otherwise gain by recouping past taxes.

Offsetting Future Income

• United States:

- The TCJA limited the amount of taxable income that can be offset using carryforward losses to 80 percent of taxable income in any given year. This cap was introduced to ensure that companies with large NOLs still pay some tax even if they had significant losses in prior years.
- Under the CARES Act (for losses incurred in 2018-2020), companies could offset 100 percent of taxable income with NOLs for those years, but this was a temporary relief measure.

• China:

 In China, companies can offset 100 percent of future taxable income with carryforward losses up to the five-year limit (or 10 years in exceptional cases). There is no cap or limitation on the percentage of taxable income that can be offset in a given year as long as it falls within the allowed carryforward period.

Industry-Specific Extensions and Exceptions

United States:

- Although the U.S. loss carryforward period is indefinite under the TCJA, certain businesses, such as farming or insurance companies, may be subject to special rules regarding the treatment of NOLs.
- Companies producing renewable energy or investing in long-term infrastructure projects may be eligible for specific tax credits or deductions that mitigate the effect of losses over time.

• China:

 Specific industries, such as high-tech enterprises, environmental protection projects, and new energy sectors, can carry forward their losses for up to 10 years. This extension recognizes that these industries often require significant up-front investment and may take longer to become profitable. Start-ups in particular industries can also benefit from this extended loss carryforward period, which can help them better manage early-stage losses and cash flow.

Effect on Mergers and Acquisitions

• United States:

Section 382 of the IRC limits the use of NOLs after a company undergoes a significant change in ownership (for example, a merger or acquisition).
 These rules prevent companies from acquiring loss-making companies solely to offset future profits with the acquired NOLs. Under section 382, the amount of NOLs that can be used annually is limited based on the company's value at the time of ownership change.

• China:

 Chinese businesses' ability to carry forward losses after a merger or acquisition may be limited. Tax authorities scrutinize corporate restructuring transactions to prevent the misuse of loss carryforwards.
 Certain mergers may be allowed to retain their loss carryforward status, but this is generally subject to approval and specific conditions.

Tax Planning and Strategic Use of Losses

• United States:

 The indefinite carryforward period offers companies more tax planning flexibility. Companies can use NOLs to optimize their tax liability, though the 80 percent limitation introduced by the TCJA requires careful consideration of the timing and amount of losses applied in future years.

• China:

 Because China's loss carryforward period is relatively short (five years for most industries), companies must plan their tax strategies carefully to ensure they can use the losses before expiration. This is particularly challenging for industries with lengthy development cycles.

Key Tax Similarities and Differences

Corporate tax codes in China and the United States share broad similarities. Both levy corporate tax on worldwide income. Publicly traded companies must prepare audited financial statements under generally accepted accounting principles. Private corporations follow similar rules to determine taxable income. However, they may use a modified form of GAAP or another specified accounting method to maintain accounting books for tax purposes.

However, compliance obligations under Chinese tax laws are more complex, and government control over the corporate taxable income determination process is more extensive. Other countries that anticipate significant audit costs often require companies to prepare pro forma tax statements following specific regulations. U.S. corporations are not required to produce pro forma financial statements to avoid potentially high compliance costs. Only actual financial statements are used to calculate tax liability under GAAP and complete the tax return.

With the differences between the two countries' corporate tax laws, and the effect of these laws on the cash flows of U.S. and foreign MNEs, studies have examined key differences in rules governing income recognition, deductions, and loss carryforwards. The results provide a foundation for empirical analyses of U.S. and foreign corporations' tax avoidance behavior, international tax planning strategies, and tax reporting incentives.

The tax policy and laws differences create an environment in which MNEs can engage in tax avoidance strategies that optimize financial performance. For example, Zhang et al. highlight that tax avoidance can reduce cash outflows, alleviating financing constraints and enhancing value creation for enterprises.²⁰ This assertion is supported by the findings of Edwards et al., who discuss how financial constraints can incentivize tax planning activities that yield cash flow savings.²¹

The effect of China's R&D superdeduction policy on high-tech industries has been the subject of various studies, highlighting its effectiveness in fostering innovation and enhancing the competitiveness of MNEs in this sector. The R&D superdeduction policy allows companies to deduct a significant percentage of their R&D expenditures from taxable income, reducing the overall tax burden and incentivizing further R&D investment.

One notable study by Ding et al. investigates the incentive effects of tax preferences on technological innovation among China's GEM [Hong Kong capital market]-listed companies. The authors found that preferential tax policies, including the R&D superdeduction,

significantly encourage firms to increase R&D investments, enhancing innovation.²² This aligns with the findings of Wan et al. who used a spatial autoregression Tobit model to analyze data from 30 regional high-tech industries in China from 2004 to 2016.²³ The Ding et al. results indicated that preferential tax policies, particularly the additional deduction for R&D expenses, positively influenced the technological innovation efficiency of these industries.

The differences in NOL carryforward policies between the United States and China have significant implications for MNEs operating in these jurisdictions. The U.S. tax system allows for an indefinite carryforward of NOLs, which can be used to offset future taxable income, providing substantial tax relief to firms during periods of profitability after experiencing losses. As documented by Koch et al., this policy encourages firms to engage in riskier investments, because they can rely on the carryforwards to mitigate future tax liabilities.²⁴ The authors also find that, in contrast, China's NOL carryforward policy is more restrictive, typically allowing losses to be carried forward for only five years, which can limit the ability of firms to smooth tax liabilities over time. Firms in China may face greater challenges in managing tax liabilities because of the shorter carryforward period, potentially leading to more conservative financial strategies and reduced investment in growth opportunities.²⁵

Moreover, Christensen et al. highlight that a substantial proportion of profitable U.S. firms benefit from large NOL carryforwards, which allows them to maintain low ETRs. This strategic tax planning is less feasible for Chinese firms, given the limitations imposed by the NOL policies.²⁶

Implications for Pillar 2 Adoption

The implications for adopting pillar 2 are profound. In the United States, the reduction of the corporate tax rate aligns with the objectives of pillar 2 because it establishes a minimum tax rate that prevents profit shifting to low-tax jurisdictions. However, the United States must balance its competitive tax environment with its compliance with international standards. This may require adjustments to incentives. The challenge is maintaining the attractiveness of the U.S. market while adhering to global tax norms.

Adopting pillar 2 presents a different set of challenges and opportunities for China. The existing tax incentives are deeply integrated into the country's economic strategy, particularly in promoting innovation and attracting foreign investment. Introducing a

minimum tax could necessitate a reevaluation of these incentives if they are perceived as inconsistent with pillar 2 objectives. Moreover, the effectiveness of tax incentives in China is often contingent on the degree of marketization and local governance structures that can complicate the implementation of uniform tax policies across diverse regions.

Both countries face the challenge of ensuring their corporate tax systems remain competitive while aligning with international tax reforms. For the United States, this may involve reassessing the balance between tax incentives and revenue generation, particularly in light of the growing scrutiny of tax avoidance strategies. For China, the focus may need a shift toward enhancing the transparency and efficiency of its tax incentives to align with global standards while still fostering domestic economic growth.

Conclusion

China and the United States offer extensive corporate tax incentives, but with disparate focuses and structures that reflect the countries' distinct economic goals. China's tax incentives prioritize regional development, industrial support, and innovation, with special attention to high-tech enterprises and small businesses. In contrast, the United States emphasizes R&D incentives, tax credits, and Opportunity Zones to foster innovation and economic growth in underserved regions.

China and the United States have different approaches to NOLs. With a five-year carryforward period (extendable to 10 years for specific industries), China's policy is more restrictive than the United States' indefinite carryforward. However, the United States imposes an 80 percent limit on loss use each year, while China allows companies to offset 100 percent of taxable income. The flexibility in the U.S. system, including the indefinite carryforward and occasional reintroduction of the carryback, provides more room for tax planning than does China's shorter time horizon. For companies operating globally, understanding the tax environment and incentive structures in both countries is crucial.

The relationship between corporate governance and tax incentives is particularly noteworthy in China. Weak corporate governance can lead to increased tax avoidance behaviors, as firms may engage in rent diversion activities to minimize tax liabilities.²⁷ This suggests that the effectiveness of tax incentives is not solely dependent on the incentives themselves but also on the governance structures within firms.

In both countries, the effectiveness of corporate income tax incentives in attracting FDI and stimulating economic growth has been the subject of extensive research. Studies indicate

that while tax incentives can enhance the attractiveness of a location for investment, the effect on actual investment outcomes can vary significantly.²⁸ In the United States, the focus has been on creating a competitive tax environment to retain and attract businesses; while in China, the emphasis has been on aligning tax incentives with national strategic goals, such as technological advancement and sustainable development.²⁹

Corporate tax incentives in China and the United States are critical for influencing corporate behavior and economic performance. While both countries use these incentives to attract investment and stimulate innovation, the underlying mechanisms and effectiveness can differ significantly because of variations in governance, economic structure, and policy objectives. The table below summarizes differences between the Chinese and U.S. corporate tax systems.

Major Differences in U.S. and Chinese Corporate Income Tax Systems

Aspect	United States	China
Standard Corporate Tax Rate	21% (federal) + state tax (3-12%)	25% (standard rate)
Preferential Tax Rate	None at federal level, but states may offer specific incentives	15% for high-tech enterprises and certain industries (e.g., software, integrated circuits)
R&D Incentives	R&D tax credit — direct reduction of tax liability; permanent credit post-TCJA	R&D expenses can be deducted with 100% superdeduction for manufacturing, 75% for other industries
Regional Development Incentives	Opportunity Zones — tax deferral and reduction of capital gains in low-income areas	Western Development Program — 15% corporate tax rate for companies in specific regions

Aspect	United States	China
Loss Carryforward Period	Indefinite (post-TCJA), 80% limit on annual income offset	Five years (extendable to 10 years for certain industries)
Loss Carryback	No carryback (after TCJA); temporary five-year carryback under CARES Act for 2018-2020	No carryback allowed
Specific Industry Incentives	Yes, particularly for renewable energy and certain sectors (for example agriculture, pharmaceuticals)	Yes, particularly for high tech, software, environmental protection, and other key sectors
Tax Incentives for High Tech	No federal preferential rate, but R&D credits can benefit high- tech enterprises	15% tax rate for certified high- tech enterprises
Tax Treatment of Foreign Income	Territorial system with global intangible low-taxed income regime	Global system, with specific incentives for foreign investment in strategic sectors
Recent Major Reforms	TCJA (2017); CARES Act (2020)	Recent policies promoting regional development, innovation, and high-tech sectors

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