

# The Two Pathways of Global Fintech Development

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## 1 Introduction

The term – “Fintech” is defined by the Financial Stability Board as “technologically enabled innovation in financial services that could result in new business models, applications, processes, or products with an associated material effect on financial markets and institutions and the provision of financial services” (Financial Stability Board, 2017). In the past few decades, the Global Fintech Industry Market is mounting rapidly and is forecasted to exhibit a compound annual growth rate (CAGR) of 7.05% from 2020 to 2027 (Coherent Market Insights, 2021). Coherent Market Insights (2021) projected that the market value of the Global Fintech Industry is going to raise drastically from US\$ 208.01 Million in 2019 to US\$ 382.38 Million in 2027. Currently, there are two major pathways of global fintech development, which are developing within or outside the current financial ecosystem. Fintech Development outside the current financial ecosystem refers to the development of fintech with the innovation or incorporation of technology firms such as Alibaba, Google, Apple while Fintech development within the current financial ecosystem refers to developing fintech relying on current financial infrastructure such as Banks.

## 2 Objective

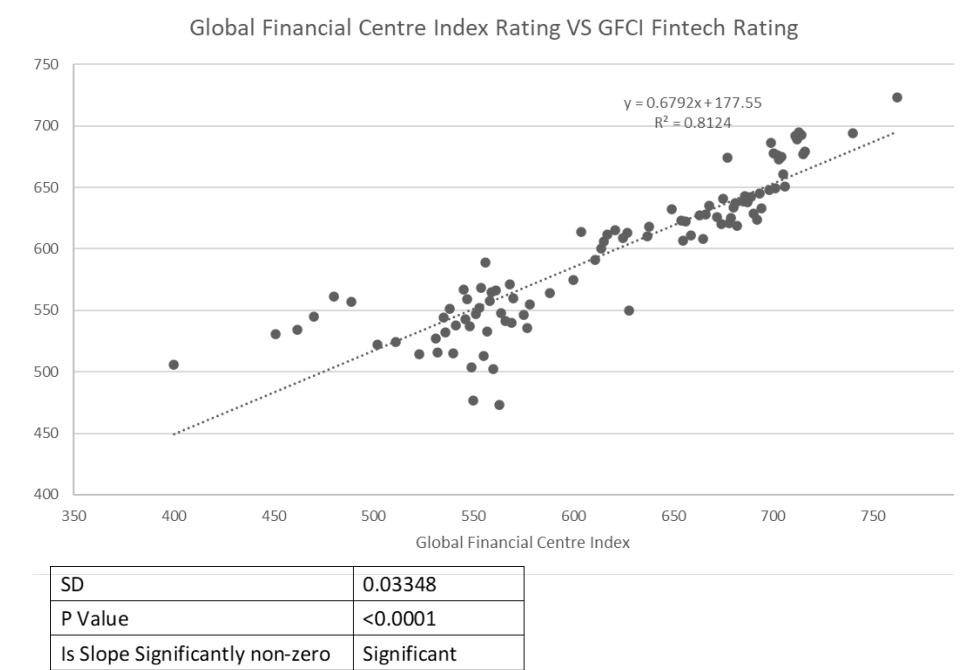
This research aims to applying qualitative approach to determine the pathway of global fintech development followed and also identify the difference between regions and countries in their bias between the two pathways.

## 3 Methodology

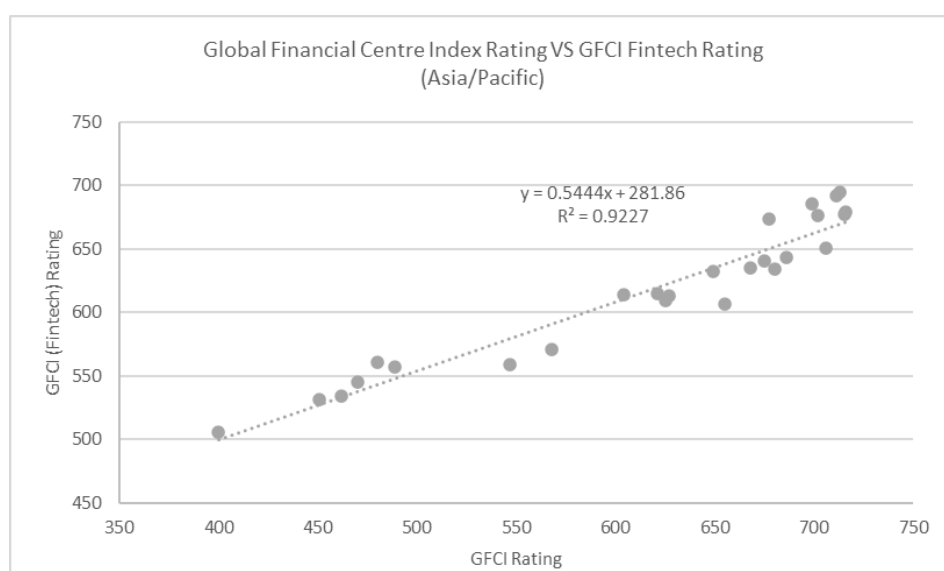
GFCI Fintech Index is used as a proxy the fintech development while Global Financial Centre Index is used as a proxy the traditional financial ecosystem. This research would use linear regression to investigate the association between the two variables.

## 4 Results: Global Fintech Development

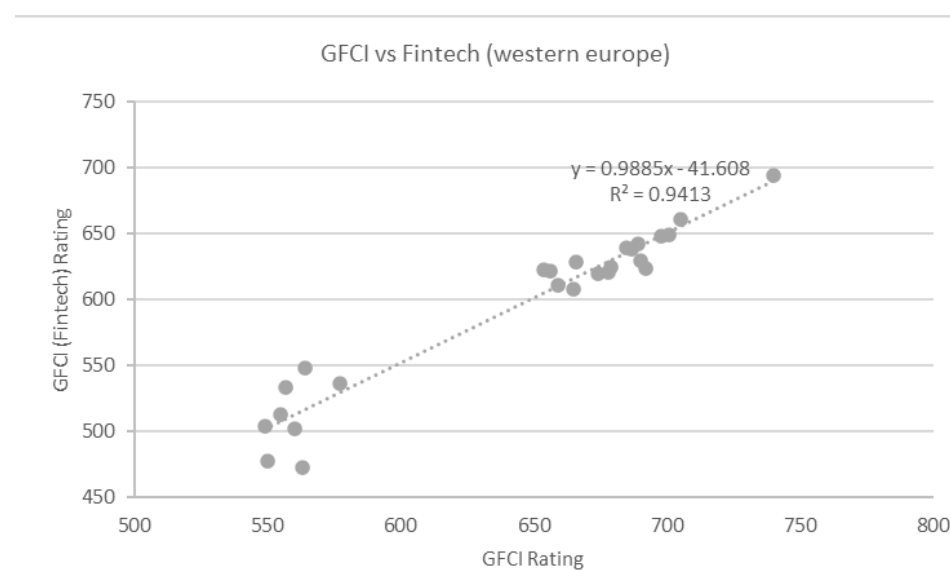
From the regression of GFCI Fintech Rating on Global Financial Centre Index Rating worldwide, the coefficient  $\alpha$  is 0.6792, which is significant and positive. This result implies that the Global Fintech Development is generally following the pathway of developing fintech within the current financial ecosystem. While the growth of techfins such as Ant Financial gives an impression that the technology element has a greater extent of significance than the financial element in fintech development, fintech is the provision of financial service through new advanced technology or innovation, which needs the support of the financial infrastructure and the financial system. The R-squared in this model is 0.8124, implying that around 80% of the fintech development can be explained by the traditional financial ecosystem globally. The remaining percentage are probably related to the technology element or innovation, which is also important in fintech development.



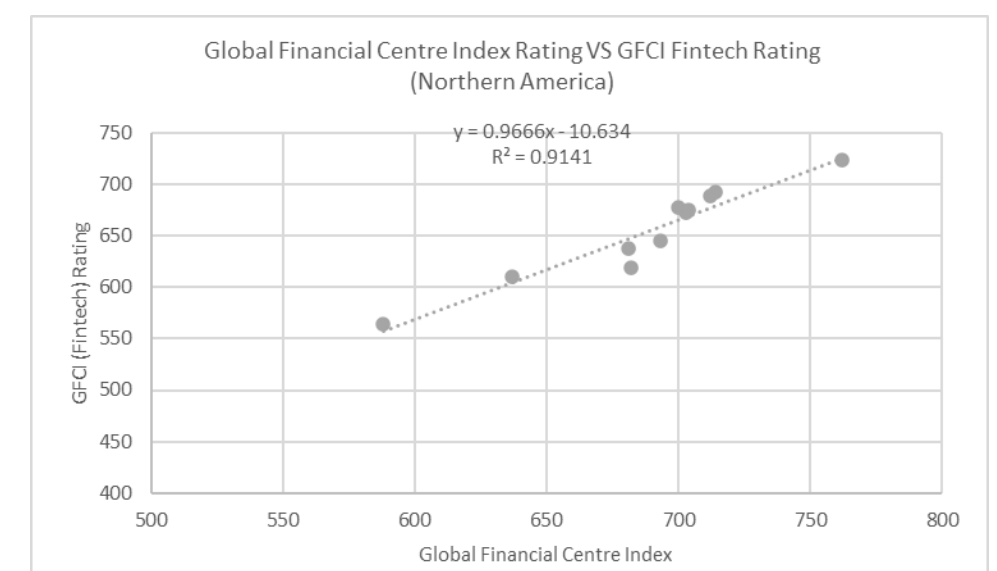
## 5 Results: Fintech Development by Region and Country



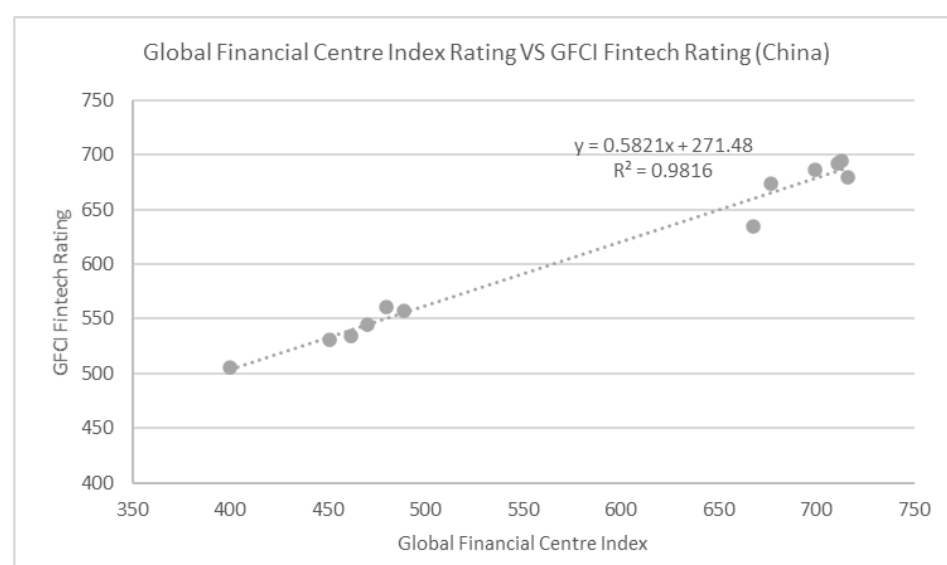
SD	0.03216
P Value	<0.0001
Is Slope Significantly non-zero	Significant



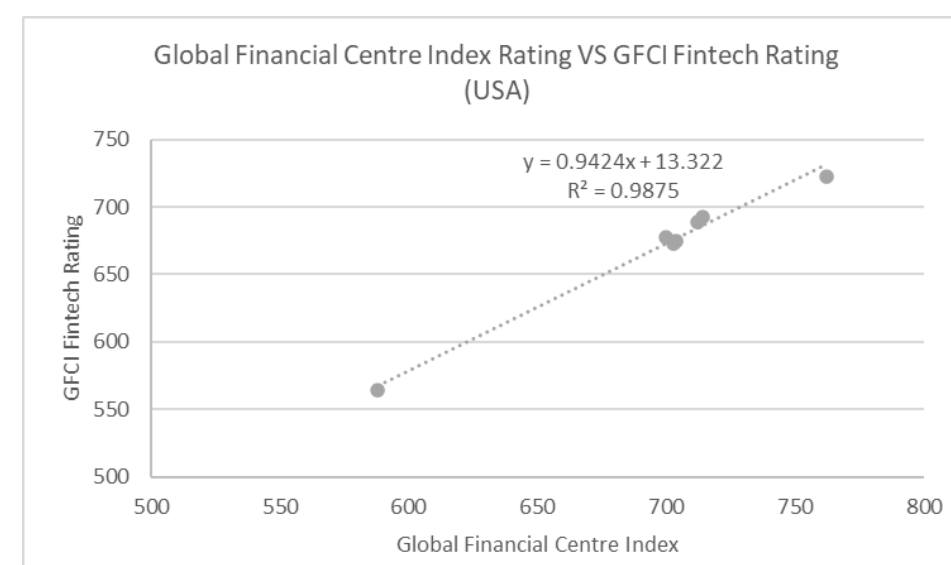
SD	0.054146
P Value	<0.0001
Is Slope Significantly non-zero	Significant



SD	0.09880
P Value	<0.0001
Is Slope Significantly non-zero	Significant



SD	0.02518
P Value	<0.0001
Is Slope Significantly non-zero	Significant



SD	0.04736
P Value	<0.0001
Is Slope Significantly non-zero	Significant

From the regression of the rating of GFCI Fintech index on the rating of Global Financial Centre Index in different regions, all of the coefficient  $\alpha$  are significant and positive, implying that The Three Regions (Asia/Pacific, Western Europe, Northern America) are all following pathway 1 in their fintech development. Nevertheless, obvious difference in their coefficient have been observed. While that of Western Europe and Northern America are above 0.9, that of Asia/Pacific is only 0.54, implying that the contribution of traditional financial ecosystem including the traditional financial institutions and financial infrastructure is higher in Western Europe and Northern America than in Asia/ Pacific. In fact, the financial ecosystem is usually more developed and well-structured with highly transparent regulation system. As a result, the traditional financial ecosystem could support the fintech development to a larger extent. In addition, the highly transparent financial regulation system also encourage the development of fintech within financial sector, which significantly avoid total separation of fintech development from the current financial framework. In the Asia/Pacific, most financial ecosystem is evolving which is less developed, giving less support to the fintech development. The lenient regulation may also enable technology firms to develop fintech outside the financial framework. As a matter of fact, another reason for that is the advancement of technology in certain Asia/Pacific countries such as Japan and Singapore. As their level of technology is advanced, it tends to contribute more in the fintech development.

Compare the regression of the rating of GFCI Fintech index on the rating of Global Financial Centre Index in China and the United States, while both coefficients  $\alpha$  are significant and positive, implying the two regions are developing fintech within the current financial ecosystem, the coefficient in China (0.582) is significantly lower than that in the United States (0.9424), indicating the contribution of the current financial ecosystem in the fintech development is lower in China. Before implementing the new stricter financial regulation, China allow techfins like Ant Financials to deliver financial service without being regulated by financial regulations, so there are more fintech development outside the financial system in China. In the United States, the financial system is more well-structured with more transparent regulation system, not only allow higher contribution of the financial ecosystem in fintech development.

## 6 Conclusion

To conclude, global fintech development is following pathway one and are generally developed within the current financial ecosystem. The current financial ecosystem in Asia/Pacific tends to have a lower contribution to fintech development compared to Western Europe and Northern America. If the country is well-developed, the traditional financial system, the fintech development will be developed within the traditional system. Fintech technology provide another pathway for country with less developed financial infrastructure to develop their fintech. Western economy have a better development in traditional financial system. Therefore, their fintech development is following pathway one. However, for Asian countries, their financial system are less developed, therefore provide more space for technology (pathway 2) to contribute to the fintech development.