



JULY 2024

RESEARCH PULSE

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THANK YOU FOR TUNING IN

Greetings everyone,

Welcome back to Research Pulse.

In this issue, we would like to share with you some interesting research experiences and insights from our academics.

We are pleased to share that Curtin Singapore was strongly represented at the recent EURAM 2024 conference held at the University of Bath in the United Kingdom from 25th June to 28th June 2024. Two conference papers were presented by our academics at the conference, and they are sharing their experiences in this issue. The EURAM conference is one of the leading conferences for researchers in the business and management disciplines. Additionally, two of our academics will share their interesting insights from their ongoing research on the collapse of the Petrodollar system and the use of artificial intelligence to aid researchers with their studies.

We continue to be deeply appreciative and fascinated by the variety of research genres developing at Curtin Singapore. Although currently small in scale, we continue to develop at a steady and sustainable pace, with the vision that our research will make a positive impact, always making tomorrow better.

I thank Dr. Zahirah Zainol, Dr. Ashley Tong, Dr. Hazik Mohamed, and Mr. Leo Kee Chye for sharing their research outputs with the wider research community and stakeholders in this issue. Please read on to discover the interesting things about research they have to share. Thanks for tuning in, and we hope you will continue to enjoy reading about our research adventures.

Best Wishes,

Dr. Adrian Tan
Research Director
Curtin Singapore



Curtin Singapore Connects with European Research at EURAM 2024

Contributed by Dr. Ashley Tong, Dr. Zahirah Zainol and Dr. Adrian Tan

Curtin Singapore was represented at the EURAM Conference 2024, held at the University of Bath, United Kingdom, from 25th June to 28th June 2024. The EURAM conference is one of the leading conferences for business and management research, and showcases research from Europe and around the world. Although it typically focuses on research in Europe, researchers from beyond Europe also attend the conference to present their research, making it a truly international conference. This year's conference theme was "Fostering Innovation to Address Grand Challenges". The focus was on research contributions in business and management to resolve the grand challenges that the world faces, with links to the United Nations Sustainable Development Goals.



Two conference papers were presented for our research in two separate competitive paper sessions. Dr. Ashley Tong and Dr. Zahirah Zainol presented their paper *Towards a More Inclusive Model of Financial Inclusion, Technology and Well-Being* for the Fintech and Well-Being session of the Business for Society General Track. The paper entitled *Layoff Decisions from the Technology Industry: Why Employers Are Still Making the Same Mistakes After All These Years and Lessons They Should have Learned* by Dr. Adrian Tan and Dr. Nik Chong (who could not attend the conference with apologies) was presented for the Unemployment and Job Insecurity session of the Human Resource Management Track.



Curtin Singapore Connects with European Research at EURAM 2024

Contributed by Dr. Ashley Tong, Dr. Zahirah Zainol and Dr. Adrian Tan
continued...



The presenters of the papers (Dr. Ashley Tong and Dr. Adrian Tan) are delighted to share their experiences as follows:



Curtin Singapore Connects with European Research at EURAM 2024

Contributed by Dr. Ashley Tong, Dr. Zahirah Zainol and Dr. Adrian Tan
continued...

Dr. Ashley Tong (Paper Presenter)

"It's my second time presenting at the EURAM conference and it's still a memorable one! This year, I worked on a finance paper together with Dr. Zahirah Zainol (Curtin Singapore) and Dr. Noor Hafihz (James Cook University, former sessional lecturer of Curtin Singapore). Unfortunately, Dr Hafihz was fully occupied with work and could not attend the conference. Thankfully, Dr. Zahirah was able to attend the conference with me, and we participated actively in various sessions and discussions.

In our paper, we presented the conceptual framework of financial inclusion covering 4 dimensions: outreach, penetration, availability, and accessibility. We discussed important factors such as individual characteristics (age, gender, education, income) that affect the adoption of financial technology to improve the well-being of the financial service users. Technology Acceptance Model (TAM) has been applied to measure the ease of use and perceived usefulness of financial technology in enhancing financial inclusion. Social well-being, financial well-being and subjective well-being of consumers were considered in our study.



Curtin Singapore Connects with European Research at EURAM 2024

Contributed by Dr. Ashley Tong, Dr. Zahirah Zainol and Dr. Adrian Tan
continued...

5 UNSDGs have been included in our paper:

- Financial inclusion and poverty reduction (SDG 1)
- Financial inclusion, health and well-being (SDG 3)
- Financial inclusion and gender equality (SDG 5)
- Financial inclusion and economic growth (SDG 8)
- Financial inclusion and inequality (SDG 10)



We received constructive feedback from the chairman, discussants and panel members and they certainly provide valuable inputs for us to refurbish our conference paper and potentially turn it into a journal paper for publication in a finance journal. The session chairman, Prof. Sharam Alijani from Neoma Business School (France), warmly invited us for future collaboration and connection. I always find the EURAM conference to be an excellent platform to meet researchers from all over the world, build new friendships and expand research networks.



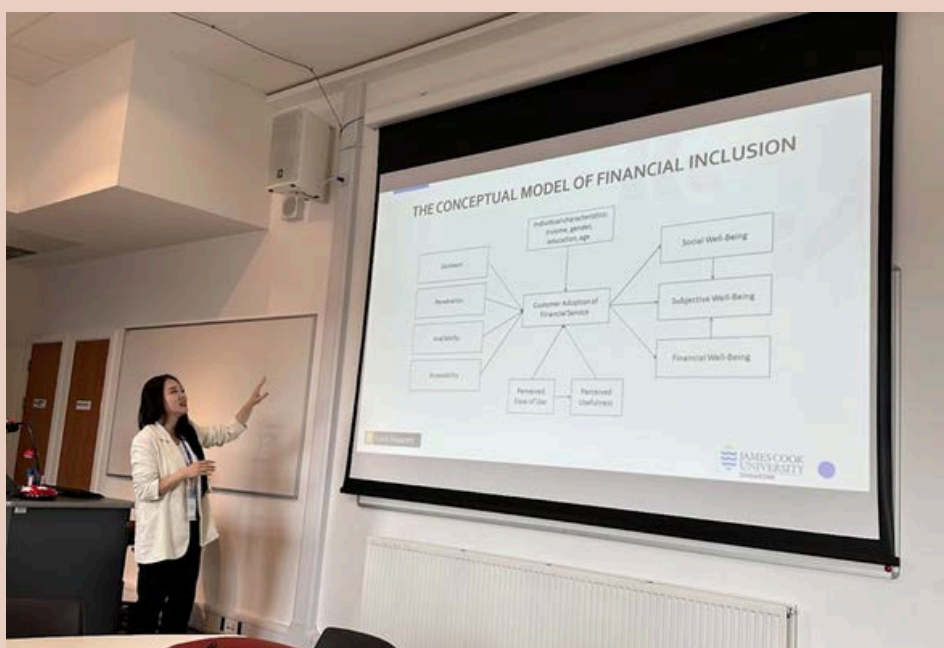
Curtin Singapore Connects with European Research at EURAM 2024

Contributed by Dr. Ashley Tong, Dr. Zahirah Zainol and Dr. Adrian Tan

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An abstract is included for your reference if you are interested to know more about our paper:

There is increasing attention on the important role that businesses have in addressing the financial challenges faced by various excluded groups. While technology has been a key driver in financial inclusion, the diversity of these excluded groups, with issues ranging from income, gender, culture, geography, and education, requires a more holistic and inclusive perspective that takes into account the needs of the different stakeholders as well as the environmental factors and their contribution beyond the financial firm's bottom line. In addition to creating a path for a more unified financial inclusion model in the literature, this strategic view is useful for policymakers and financial leaders. This paper proposes a more inclusive model of financial inclusion by synthesizing the literature surrounding the key questions surrounding the important factors of financial inclusion and the effects they have on one another. Grounded in the literature, a conceptual model is developed to address the needs of different marginalized groups. Further research questions will conclude the discussion to advance our call for a more inclusive financial inclusion model."



Curtin Singapore Connects with European Research at EURAM 2024

Contributed by Dr. Ashley Tong, Dr. Zahirah Zainol and Dr. Adrian Tan
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Dr. Zahirah Zainol (Attendee)

“EURAM 2024 was the first Management conference I attended, and it was insightful, enthralling and inspiring! Ashley and I attended a lab session organized by Airbus in Filton to immerse ourselves in the complexities and mechanics of aviation parts manufacturing. Specifically, the site in Filton specializes in wing and landing gear testing and manufacturing. The group was brought around to 4 sections of the Airbus site, and we had to follow strict rules to ensure the confidentiality of the information and proprietary technology.

Next, we attended the conference opening and keynote speech by Professor Nicolai Foss from Copenhagen Business School on the theme “Should Managerial Authority Be Rethought?”. In a prevalent world of agile and lean organizational cultures, Professor Foss posited that hierarchy, and the role of managers are important to steer the company and employees through challenging times.

Ashley, Adrian and I attended several conference paper sessions discussing the complexities and ethical issues of AI in higher education, spirituality-infused learning in business schools, effects of vacation on post-work motivation, just and fair treatment of platform workers, the importance of instilling hope in the workplace, and effects of small, short-term lending on small businesses. Many discussions and ideas were exchanged in those sessions with the presenters and attendees.

What intrigued me the most about EURAM was the diversity of thought and methodologies presented at the conference. Comments from attendees were very constructive and inclusive. It was very refreshing to see a lot of research on well-being, a topic reflected recently in my research and a personal cause I champion. I thoroughly enjoyed my time at EURAM 2024 and can’t wait to see what’s in store for EURAM 2025 in Florence, Italy.”



Curtin Singapore Connects with European Research at EURAM 2024

Contributed by Dr. Ashley Tong, Dr. Zahirah Zainol and Dr. Adrian Tan
continued...

Dr. Adrian Tan (Paper Presenter)

“It is a pleasure and a humbling experience to have been able to present our research in relation to the layoffs that are happening in the technology industry. This was research that Nik and I had developed and worked on for slightly more than a year before the conference, and which is still on-going. It was a pity Nik could not attend the conference, but his presence was felt in the research that was presented to the attendees of the paper presentation session.

In the paper session, I presented the research which aimed to address how employers make decisions on layoffs. Our curiosity on this research question arose from the never-ending layoffs which increased in intensity in the technology industry worldwide since the beginning of 2022 in the post-pandemic era. We found the relentless episodes of layoffs in known technology companies intriguing, astonishing and atypical, hence feeling the need to comprehend the thinking approach that employers follow when making decisions on layoffs, and whether they were indeed justifiable, as well as why employers continue to make the same mistakes in layoff decisions, and lessons they should have learned. The conference was a golden opportunity to present our research findings since the conference paper call was one that also encouraged a link to a United Nations Sustainable Development Goal. Our paper clearly aligned with UN SDG 8 on decent work.



Curtin Singapore Connects with European Research at EURAM 2024

Contributed by Dr. Ashley Tong, Dr. Zahirah Zainol and Dr. Adrian Tan

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Although it was a late evening paper presentation session which started only after 6pm (UK time), I was thankful there were attendees who came to listen to the presentation, along with the presentations of two other presenters from other universities. There were lively and candid discussions after each presentation, and I was happy to receive very constructive feedback on the methodology and findings from the attendees, some of whom were PhD students. My experience at this conference is that the qualitative research culture in Europe is really rich and strong. There was clear indication made by speakers of the conference events of the increasing relevance and need for qualitative research in management since management is not entirely a science, but a social science. Hence, not everything should be assigned a number and be tested, rendering qualitative research as increasingly appropriate.



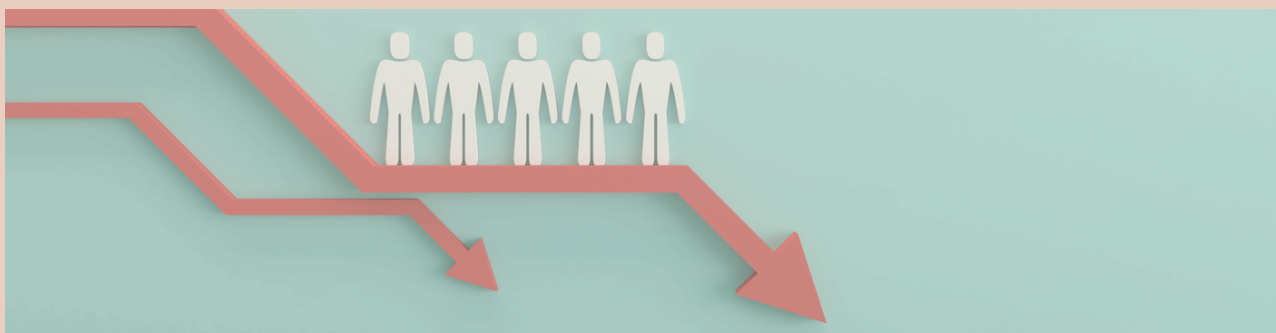
Curtin Singapore Connects with European Research at EURAM 2024

Contributed by Dr. Ashley Tong, Dr. Zahirah Zainol and Dr. Adrian Tan

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I am sure that anyone reading this is interested to know what our research was about. Hence, the abstract is reproduced as follows:

The waves of layoffs globally in the technology industry are cause for concern from a humanistic perspective. Although layoffs are not uncommon in any industry, the issue is important but often neglected in terms of employee well-being. Leveraging on the technology industry as a context, the focus of this study is to explore the executive decision-making process for a layoff decision and explore the reasons why employers are still committing the same blunders when deciding on layoffs. Through the conduct of web-based research, reports of layoffs from multiple online mass media sources of 20 prominent technology companies were analyzed. The Gioia methodology was used to uncover the aggregate influencing reasons for layoffs. These reasons were further meta-analyzed for exploration of the reasons behind such poorly justified layoff decisions, managerial implications and lessons employers should have learned from the layoff decisions. The analysis identified three key elements which influence a layoff decision, namely the enactment of business competitive strategies, the pursuit of business sustainability and safeguarding of shareholder interests, and misjudgments in business decisions of the organization leaders. Our research reinvigorates a call to action to responsibly and morally consider how management decisions impact on the emotional and personal well-being of those being laid off and those remaining with the company. This research contributes to a deeper understanding of the challenges faced by companies during layoffs and provides actionable insights for improving decision-making to mitigate the effects of layoffs on employees. The study also contributes to the promotion of the decent work agenda of the United Nations Sustainable Development Goals."



Google NotebookLM: A Paradigm Shift in Academic Research and Knowledge Management

Contributed by Mr. Leo Kee Chye

Abstract

This article examines the potential impact of Google's Notebook Language Model (NotebookLM) on academic research, teaching, and knowledge work. By analysing its core features and functionalities, we explore how NotebookLM can enhance productivity, facilitate discovery, and promote collaboration in knowledge-intensive fields. While acknowledging potential drawbacks, this study argues that NotebookLM represents a significant advancement in AI-assisted research tools, offering new possibilities for information synthesis and idea generation.

1. Introduction

The advent of Generative Artificial Intelligence (GenAI) has ushered in a new era of tools designed to augment human cognitive capabilities. Google's Notebook Language Model (NotebookLM), launched in June 2024, stands out as a particularly promising application for researchers, educators, students, and knowledge workers. This article critically examines the potential of NotebookLM to transform academic and professional practices in information-intensive fields.

2. Key Features of NotebookLM

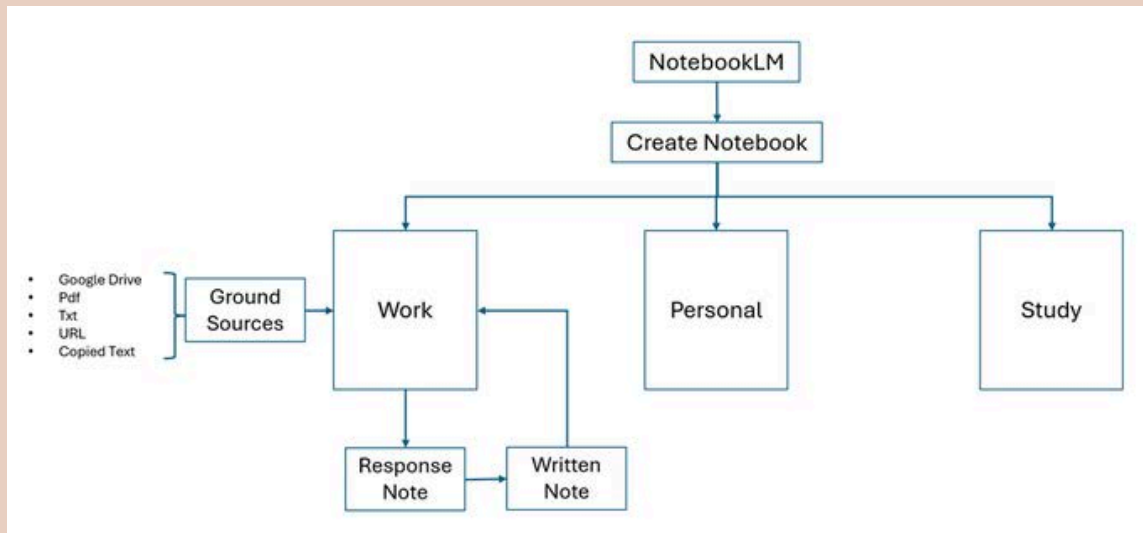
NotebookLM distinguishes itself through several key features. Firstly, it offers diverse source integration, supporting up to 50 sources per notebook and accommodating various formats including PDFs, text files, URLs, and content from Google Drive. Secondly, it boasts substantial capacity, with each source able to contain up to 500,000 words and notebooks allowing for 1,000 accompanying notes. Thirdly, it employs source grounding, where all AI-generated insights and summaries are directly linked to specific sources, ensuring traceability and academic rigour. Lastly, Google claims that uploaded sources are not used to train their language models, addressing a common concern in academic circles regarding privacy preservation.



Google NotebookLM: A Paradigm Shift in Academic Research and Knowledge Management

Contributed by Mr. Leo Kee Chye

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3. Enhancing Academic Productivity

3.1 Efficient Information Retrieval

Unlike traditional note-taking applications that rely on manual tagging systems, NotebookLM leverages GenAI (specifically, Gemini 1.5 at the time of writing) to organise and retrieve information dynamically. This approach offers a more flexible and intuitive method of accessing stored knowledge, potentially saving researchers significant time in literature reviews and data analysis.

3.2 Automated Synthesis and Summarisation

The platform's ability to generate structured outlines, complete with FAQs and key insights, from a collection of sources represents a valuable tool for quickly assimilating new bodies of research. This feature can be particularly beneficial for graduate students conducting comprehensive literature reviews, researchers exploring new interdisciplinary connections, and educators preparing course materials on evolving topics. It is hypothesised that researchers using AI-assisted tools like NotebookLM could experience significant increases in productivity when conducting literature reviews, though empirical studies are needed to confirm this.

Google NotebookLM: A Paradigm Shift in Academic Research and Knowledge Management

Contributed by Mr. Leo Kee Chye

continued...

4. Facilitating Discovery and Innovation

4.1 Cross-disciplinary Connections

NotebookLM's capacity to integrate and synthesise information from diverse sources makes it an invaluable tool for interdisciplinary research. By identifying connections that might not be immediately apparent to human researchers, the platform can suggest novel research directions, highlight unexplored areas within a field, and facilitate the transfer of methodologies or concepts between disciplines. Future research could investigate whether AI-assisted research tools significantly increase the likelihood of identifying cross-disciplinary connections, potentially leading to more innovative research outcomes.

4.2 Idea Generation and Hypothesis Formation

The AI's ability to propose new ideas and connections based on analysed sources can serve as a catalyst for creative thinking and hypothesis generation. This feature may prove particularly valuable in brainstorming sessions for research proposals, identifying gaps in current literature, and developing innovative approaches to longstanding problems. By augmenting human creativity with AI-driven insights, NotebookLM has the potential to accelerate the pace of academic innovation and discovery.



Google NotebookLM: A Paradigm Shift in Academic Research and Knowledge Management

Contributed by Mr. Leo Kee Chye

continued...

5. Enhancing Collaboration and Knowledge Sharing

5.1 Facilitating Team Research

NotebookLM's collaborative features enable research teams to work more effectively together. Teams can share notebooks containing individual findings, allowing for easy access to collective knowledge. The platform can help identify complementary insights or conflicting data points across different team members' work, fostering more comprehensive and rigorous research outcomes. Additionally, NotebookLM can generate collective study guides that amalgamate diverse inputs, ensuring that all team members have a shared understanding of the project's scope and findings. This functionality has the potential to enhance peer review processes, facilitate more robust feedback loops, and ultimately improve the quality of research outputs.

5.2 Supporting Interdisciplinary Dialogue

By providing a common platform for researchers from different disciplines to share and analyse information, NotebookLM can play a crucial role in fostering interdisciplinary collaboration. It can help break down silos between academic departments by facilitating the exchange of ideas and methodologies across traditional disciplinary boundaries. This cross-pollination of ideas can lead to novel insights and approaches that might not emerge within the confines of a single discipline. Furthermore, by bringing together diverse academic perspectives, NotebookLM can facilitate the development of shared vocabularies and conceptual frameworks, laying the groundwork for more effective interdisciplinary communication and collaboration.



Google NotebookLM: A Paradigm Shift in Academic Research and Knowledge Management

Contributed by Mr. Leo Kee Chye

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6. Potential Drawbacks and Ethical Considerations

While NotebookLM offers significant benefits, it is important to consider potential drawbacks. There is a risk that excessive use of AI-assisted tools could lead to a homogenisation of academic writing styles and potentially stifle diverse voices in scholarly discourse. This over-reliance on AI-generated content raises questions about the originality and authenticity of academic work. Additionally, the upload of sensitive research materials to cloud-based platforms raises concerns about data security and intellectual property rights. Researchers and institutions will need to carefully consider the implications of storing potentially sensitive or proprietary information on third-party platforms. Lastly, given Google's history of discontinuing products, there are concerns about the long-term availability and support for NotebookLM. This uncertainty may make some researchers hesitant to fully integrate the tool into their workflows, fearing potential disruption if the service is discontinued.

7. Conclusion

Google NotebookLM represents a significant advancement in AI-assisted research tools, offering the potential to transform how academics, educators, and knowledge workers engage with information. Its ability to enhance productivity, facilitate discovery, and promote collaboration makes it a valuable asset in the increasingly complex landscape of modern research and education. However, the responsible use of such tools requires a balance between leveraging their capabilities and maintaining the integrity and originality of academic work. As we continue to integrate AI-assisted tools into academic practices, ongoing research and ethical considerations will be crucial in shaping their role in knowledge production and dissemination.



Google NotebookLM: A Paradigm Shift in Academic Research and Knowledge Management

Contributed by Mr. Leo Kee Chye

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Note on References

This article is based on preliminary information about Google NotebookLM and speculative analysis of its potential impact on academic work. As of the time of writing, there are no peer-reviewed studies specifically examining NotebookLM's effects on research productivity or academic practices. Future empirical research is needed to substantiate the claims and hypotheses presented in this article.

Websites:

To access Google NotebookLM:

<https://notebooklm.google/>

To watch a demo using NotebookLM by the author:

<https://youtu.be/EmClqakorrk>

Mr Leo Kee Chye is a sessional lecturer at Curtin Singapore where he teaches finance and economics for the undergraduate programmes. He is also interested in the recent development in GenAI and its impact on educators and students.



What Singapore Can Expect from the End of the Petrodollar

Contributed by Dr. Hazik Mohamed

Introduction

On 9th June 2024, the US-Saudi Arabia petrodollar deal expired after 50 years. Established on June 8, 1974, it was a historic and crucial agreement that supported the US dollar's dominance for decades by facilitating the exchange of US dollars for crude oil exports. After the 1973 oil crisis, the petrodollar agreement was formalized, stipulating that Saudi Arabia would only price its oil exports in US dollars and use the extra money from oil sales to purchase US Treasury bonds. The United States gave the kingdom military backing and defence in exchange. Under this arrangement, Saudi Arabia secured its economic and general security while the United States gained a reliable supply of oil and a captive market for its debt¹.

The petrodollar system has been a cornerstone of the global economic order since the 1970s, when oil-exporting countries began pricing oil exclusively in U.S. dollars. The end of the arrangement will have significant geopolitical, economic, and financial consequences.

Implications for Singapore

a. Economic and Trade Impacts:

Given Singapore's prominence as a global trade hub, the potential collapse of the petrodollar system might have far-reaching effects. The move to multiple currencies in the global oil trade could lead to higher levels of currency volatility and increased transaction costs because of the necessity of frequent currency conversions and exchange rate hedging. This environment may disrupt the established trade patterns and necessitate the use of more sophisticated financial strategies in order to manage the associated risks. Singapore would need to diversify its foreign exchange reserves in order to adapt its economy due to its deep integration into global trade networks. This diversification could mean holding larger amounts of other major currencies and potentially precious metals like gold to guard against US dollar fluctuations.



What Singapore Can Expect from the End of the Petrodollar

Contributed by Dr. Hazik Mohamed

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The country's strategic location and robust infrastructure can serve as assets in navigating these changes, ensuring it remains a vital node in global commerce despite potential disruptions.

b. Financial Services Sector:

For Singapore's financial services sector, which is already a global leader in currency trading and financial intermediation, the petrodollar's decline may bring both opportunities and challenges. The move to multi-currency oil transactions would likely increase the need for financial services related to currency risk management. To meet this growing demand, Singapore's creative and effective banks and financial institutions may expand the range of services they provide, further establishing Singapore as a preeminent financial hub. Furthermore, this scenario may attract more financial activities to Singapore as businesses search for an advanced and stable environment to manage complex multi-currency operations. Singapore can capitalize on potential market volatility to expand its financial services industry by expanding upon its existing strengths and improving its financial infrastructure.

c. Investment Flows:

The potential global economic realignment that would accompany the demise of the petrodollar could have a substantial effect on capital flows. Singapore may become more and more of a desirable location for investments due to its robust regulatory environment and stable political environment. If investors are looking for safe havens in a more dispersed global monetary system, Singapore might be the best place for them to invest. Many economic sectors could benefit from this capital inflow, which would promote growth and innovation. However, to fully achieve this potential, Singapore would need to maintain high standards of efficiency, transparency, and governance in order to continuously improve its investment climate. Furthermore, creating new financial services and products to meet the demands of foreign investors may increase Singapore's attractiveness as a global financial hub.



What Singapore Can Expect from the End of the Petrodollar

Contributed by Dr. Hazik Mohamed

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d. Energy Prices and Supply Chains:

Supply chains will unavoidably alter as a result of moving past the petrodollar system, and the price of energy will fluctuate internationally. With a large maritime industry and high energy consumption, Singapore's economy could be seriously jeopardized by these changes. Variations in energy prices can have an impact on production and transportation costs, making it more difficult for Singaporean businesses to compete. In order to lower these risks and decrease its dependency on imported fossil fuels, Singapore may increase its investments in renewable energy sources. Furthermore, boosting energy efficiency would save costs and advance environmental sustainability across the board in the economy. Singapore can safeguard its economic stability and promote sustainable growth in the face of shifts in the global energy market by proactively altering its energy policies and infrastructure.

e. Geopolitical Positioning:

With the demise of the petrodollar, Singapore will have to rely on its well-established diplomatic skills to negotiate a shifting geopolitical environment. As the relative influence of superpowers like the US and China shifts, Singapore must carefully manage its relationships in order to maintain its strategic advantages. Maintaining strong ties with key oil-exporting nations and actively participating in international organizations will be crucial. Singapore's ability to collaborate and mediate on global financial and economic issues could enhance its reputation internationally. By making use of its strategic location and diplomatic ties, Singapore can continue to play a vital role in creating a comprehensive and stable global financial system. By taking the initiative, Singapore will be able to manage the risks and take advantage of the opportunities brought about by the move away from the petrodollar.



What Singapore Can Expect from the End of the Petrodollar

Contributed by Dr. Hazik Mohamed

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Conclusion

When all is said and done, the demise of the petrodollar system would signify a profound shift in the global political and economic landscape, affecting a wide range of sectors and regions. It represents a dramatic change in the financial and economic landscape of the world. A more complex and multipolar world is suggested by the US dollar's decline, the possible emergence of alternative reserve currencies, and the growing use of digital currencies. This change may lead to higher borrowing costs for the US, more volatility in the oil market, and notable changes in the patterns of international trade. Although the demise of the petrodollar may present challenges, Singapore now has an opportunity to further solidify its position as a flexible and resilient global financial hub. It can effectively navigate the transition by taking proactive measures to manage risks and capitalize on emerging opportunities.

¹ <https://www.nasdaq.com/articles/us-saudi-petrodollar-pact-ends-after-50-years>

Dr Hazik Mohamed is a sessional lecturer at Curtin Singapore where he teaches economics for the undergraduate programmes. He is also an experienced international consultant working on various capacity-building projects in various industries.

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Latest Research Publications



By Dr Tien Nguyen:

"The organisational impact of agility: a systematic literature review"

~ Management Review Quarterly (Published May 2024,
DOI: <https://doi.org/10.1007/s11301-024-00446-9>)



Calendar of Key Events

These are some upcoming events planned for the year. Full details of the events will be made known through official communication nearer the time.

***TBA**: To Be Announced

4
SEPTEMBER
2024

**Global Campuses
Brown Bag Seminar**

25
SEPTEMBER
2024

**Qualitative Research
Methods Workshop**

25
SEPTEMBER
2024

**Curtin Singapore
Research Symposium**

TBA
NOVEMBER
2024

SDG Symposium 2024

