
Legislating the Meaning of Digital Currency in the Australian Income Tax Law

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*Since Bitcoin was created in 2009, the Australian tax law has slowly responded to the increasing trading in, and widespread use of, crypto-assets. In 2017, the goods and services tax (GST) legislation was amended to introduce a new concept of “digital currency”, effectively exempting crypto-assets used as a means of exchange or for the provision of financial services from taxable supplies. However, the international landscape continued to evolve: El Salvador declared Bitcoin a legal tender in 2021, and the Chinese central bank issued a new digital currency in 2020. Responding to these global shifts, the Australian federal government, in 2022, proposed refining the GST definition of “digital currency” to exclude “government-issued digital currencies”. Moreover, it mooted the idea of extending this amended definition to the income tax law. This article examines the proposal to insert a new definition of “digital currency” within Australian income tax law for the first time. It begins with an exploration of the foundational principles underpinning GST and income tax. Then, navigating legal and policy implications, it casts a spotlight on digital currency within the income tax paradigm. A pertinent case in point is *Seribu Pty Ltd v Federal Commissioner of Taxation*, in which the Administrative Appeals Tribunal held that Bitcoin was not a foreign currency subject to the taxation of foreign currency gains and losses under Div 775 (the forex regime). This article then examines the GST characterisation of digital currency, juxtaposing it against the meaning of money and characteristics of central bank-issued currencies. It concludes that the adoption of the GST definition of digital currency for the income tax law is logical and that the implementation of the proposal will strengthen the legal frameworks for taxing digital currencies in Australia.*

I. INTRODUCTION

In Australia, the *A New Tax System (Goods and Services Tax) Act 1999* (Cth) (the *GST Act*) defines “digital currency” as “digital units of value that:

- (a) are designed to be fungible; and
- (b) can be provided as consideration for a supply; and
- (c) are generally available to members of the public without any substantial restrictions on their use as consideration; and
- (d) are not denominated in any country’s currency; and
- (e) do not have a value that depends on, or is derived from, the value of anything else; and
- (f) do not give an entitlement to receive, or to direct the supply of, a particular thing or things, unless the entitlement is incidental to:
 - (i) holding the digital units of value; or
 - (ii) using the digital units of value as consideration.”¹

In September 2022, the Australian government released the Exposure Draft for *Treasury Laws Amendment (Measures for Consultation) Bill 2022* (Cth) (the Exposure Draft) to amend the definition of “digital currency” to exclude digital currencies issued by, or under the authority of, a government

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¹ *A New Tax System (Goods and Services Tax) Act 1999* (Cth) s 195-1 (definition of “digital currency”).



(government-issued digital currencies).² The amended definition is expected to be used for the Australian income tax law.³

The Australian income tax system distinguishes between income and capital generally according to common law principles. Special regimes apply to assets used for a particular purpose, such as capital gains tax (CGT) provisions, taxation of financial assets, and trading stock rules. Another regime is the foreign exchange (forex) regime that applies to foreign currencies. Digital currencies exhibit some characteristics similar to fiat currencies, for example, fungibility and (pseudo)anonymity.⁴ There are also unique or novel characteristics: unlike fiat currencies, digital currencies may be distributed for free (eg, airdrops) or acquired because of exertion (eg, mining) or having a stake in digital currencies (eg, minting or forging).⁵ Transaction fees or rewards may be derived from dealing with or holding digital currencies,⁶ and certain events (eg, forking) are unique to digital currencies.⁷

The government's proposal to incorporate the amended definition of digital currency in the *GST Act* and exclude digital currency in the meaning of foreign currency⁸ needs to be rationalised. Whereas "crypto-assets"⁹ can be used for payment of goods and services, akin to foreign currencies in the traditional

² The announcement was made in Stephen Jones, Assistant Treasurer, "Crypto Not Taxed as Foreign Currency" (Joint Media Release, 22 June 2022). The announcement was followed by the consultation for "clarifying crypto not taxed as foreign currency", which was complete in September 2022. See Exposure Draft for *Treasury Laws Amendment (Measures for Consultation) Bill 2022* (Cth) s 1.

³ Exposure Draft for *Treasury Laws Amendment (Measures for Consultation) Bill 2022* (Cth) s 11 (inserting "digital currency has the same meaning as in the *GST Act*" in *Income Tax Assessment Act 1997* (Cth) s 995-1(1)). Commonwealth of Australia, *Budget Measures Budget October 2022-23* (Budget Paper No 2, 2023) 11 (estimating no revenue impact over the four years from the 2022–2023 income year). Chodorow makes a similar suggestion for the US income tax legislation to define foreign currency that excludes Bitcoin: in Adam Chodorow, "Bitcoin and the Definition of Foreign Currency" (2016) 19(6) *Florida Tax Review* 365.

⁴ (Pseudo)anonymity is not a unique characteristic of digital currencies. Transaction details such the payee, time and amount of a payment are generally not traceable when bank notes and coins are used. Conversely, transactions on public blockchains are technically readable by anyone. In the context of blockchain-based transactions, the (pseudo)anonymous feature is discussed in the context of the difficulty in identifying the holders of the wallets.

⁵ Tax treatment for the creation of digital currencies is particularly troublesome: see, eg, Elizabeth E Lambert, "The [US] Internal Revenue Service and Bitcoin: A Taxing Relationship" (2015) 35(1) *Virginia Tax Review* 88. If cash is found on the street as a windfall, the Australian income tax law does not recognise it as a taxable asset. However, airdrops and the coins received from mining or forging may be considered taxable assets. An airdrop refers to a process where digital coins are distributed generally free of charge to increase the awareness of a digital currency. Mining refers to a process of obtaining a brand-new coin using "proof-of-work" that requires considerable computational capacity (referred to as hash power) and large electricity consumption. If a new coin is issued by the "proof-of-stake" mechanism, the issuance is commonly referred to as minting or forging. Proof-of-work and proof-of-stake are consensus mechanisms of a decentralised digital currency system, and the degree of decentralisation of a digital currency depends on the consensus mechanism of the currency. Although both mechanisms use the public to verify transactions, proof-of-stake operates to randomly select participants in the currency system to validate transactions. Any person can mine a coin, whereas only the existing holders of a currency can mint or forge a coin. See the technical concepts in Australian Taxation Office, *Crypto Assets Glossary* <<https://www.ato.gov.au/individuals/Investments-and-assets/crypto-asset-investments/crypto-assets-glossary>>.

⁶ Transactional fees may be received as additional rewards for mining or minting digital coins. If a coin is mined, the fees would likely be treated as business income by reason of the activities of mining. If a coin is forged, the fees may be treated as investment income on the basis that the right to receive the coin existed by virtue of holding a coin or coins in the same currency. Certain tokens allow eligible owners to be entitled to a reward, which is similar to interest on savings in tax characterisation. See Australian Taxation Office, n 5.

⁷ Forking involves software upgrade (or changing protocols). The degree of software upgrade determines whether forking is a soft fork or a hard fork. Whereas soft forks do not change the form of coins held, hard forks result in a currency splitting into two currencies, with each owner receiving two post-fork coins for one coin held before the fork. This is a rare event for fiat currencies. Conversely, redenomination or rebasing, which crypto-assets may experience, can similarly occur to fiat currencies. In 1963, the Australian government decimalised Australian currency with the conversion rate of two Australian dollars (AU\$) for one Australian pound (£A).

⁸ Exposure Draft for *Treasury Laws Amendment (Measures for Consultation) Bill 2022* (Cth) s 12 (amending the definition of "foreign currency" in *Income Tax Assessment Act 1997* (Cth) s 995-1(1)).

⁹ The Organization for Economic Cooperation and Development (OECD) states that the most appropriate terminology that catches all digital financial assets based on decentralised ledger technology (DLT) and cryptography is "crypto-assets". See OECD, *Taxing Virtual Currencies: An Overview of Tax Treatments and Emerging Tax Policy Issues* (OECD Publishing, 2020) 35 (*Taxing Virtual Currencies*).

understanding,¹⁰ this article examines the question of whether it is correct to treat digital currencies as not being foreign currencies under the Australian income tax law, where they are used as a means of exchange for goods and services.

Different definitions may be used in other statutes, whether tax-related or not, which is appropriate insofar as they serve the intent and purpose of the applicable laws. Conversely, the exact definition applied to different regimes is equally justifiable if it is within the spirit of the relevant laws. The intent of defining “digital currency” for the *GST Act* is to equalise the tax treatment of digital currencies to that of “money”. For income tax purposes, the proposed adoption of the new definition of “digital currency” is intended to ensure that the forex regime does not apply to crypto-assets.

This article concludes that the exclusion of “digital currency” from the meaning of foreign currency is appropriate for income tax purposes. In coming to this conclusion, Part II provides the background of inserting the goods and services tax (GST) definition of “digital currency”. It explains the design principles of the *GST Act*, which differs from those of income taxation. Part III discusses the administrative practice of the Commissioner of Taxation (the Commissioner) in relation to the income tax treatments of crypto-assets. This will include a discussion of the Commissioner’s ruling that Bitcoin is not a foreign currency for Div 775 of the *Income Tax Assessment Act 1997* (Cth) (*ITAA 1997*).¹¹ Part IV discusses *Seribu Pty Ltd v Federal Commissioner of Taxation*¹² (*Seribu*), in which the tribunal sided with the Commissioner. The practical significance of the case was whether the taxpayer was allowed to deduct the loss that resulted from transacting Bitcoin under the forex regime, as opposed to CGT provisions that would shelter the loss in the absence of an offsettable capital gain. Accordingly, Part IV discusses the intent and operations of the forex regime. Part V evaluates the proposed adoption of the amended GST definition of “digital currency” compared with the characteristics of money and government-issued currencies. In Part VI, the article concludes that the proposed exclusion of “digital currency” in the meaning of foreign currency is sound, and the forex regime should not apply to digital currencies.

II. BACKGROUND: THE GST DEFINITION OF DIGITAL CURRENCY

Bitcoin was not the world’s first digital currency. In the early 1980s, David Chaum, an American computer scientist, introduced an untraceable payment system to address privacy concerns with electronic banking services.¹³ This system used cryptographic proof instead of public trust to verify transactions. A combination of two protocols was designed to provide anonymity of electronic payments from payee and payer perspectives, whereby transactional details could be revealed if fraud or counterfeiting was suspected. In 1989, Chaum established a company “DigiCash” and launched a digital currency named “eCash”. However, eCash was unsuccessful, and the company was declared bankrupt after nine years of operations.

In 2008, a pseudonymous person (or group of persons) known by the name of Satoshi Nakamoto, published a white paper introducing a digital currency called “Bitcoin”.¹⁴ Although Bitcoin was founded on the model of eCash, the critical difference was the removal of banks. Satoshi Nakamoto was

¹⁰ B Michel and Titiana Falcão reports that crypto-assets are more commonly utilised as asset substitution, as opposed to currency substitution, in high-income countries: B Michel and Titiana Falcão, “Cryptoization through Currency Substitution: Tax Policy Options for Low-income Countries” (2022) 107(8) *Tax Notes International* 973. However, this article discusses the taxation of crypto-assets used as currency substitution in light of the proposed amendment to the GST definition of digital currency.

¹¹ Australian Taxation Office, *Income Tax: Is Bitcoin a “Foreign Currency” for the Purposes of Division 775 of the Income Tax Assessment Act 1997?*, TD 2014/25, 17 December 2014.

¹² *Seribu Pty Ltd v Federal Commissioner of Taxation* (2020) 111 ATR 882; [2020] AATA 1840. In Australia, digital currency has been dealt in no other tax cases but in cases discussing the breaches of directors’ duties (*Matter Technology Ltd v Mrakas* (2018) 278 IR 435; [2018] NSWSC 507), breaches of the securities and investments law (*Noicos v Dawson* [2019] FCA 2197) and criminal offences (*Day v The Queen* (2019) 277 A Crim R 95; [2019] WASCA 60).

¹³ David Chaum, “Blind Signatures for Untraceable Payments” in David Chaum, Ronald L Rivest and Alan T Sherman (eds), *Advances in Cryptology* (Springer, 1983).

¹⁴ Satoshi Nakamoto, “Bitcoin: A Peer-to-Peer Electronic Cash System” (White Paper, 31 October 2008) <<https://www.debr.io/article/21260-bitcoin-a-peer-to-peer-electronic-cash-system>>.

disillusioned in banks as Lehman Brothers, the fourth largest investment bank in the United States (US), collapsed during the Global Financial Crisis.¹⁵ In the Bitcoin system, the community of Bitcoin users would verify transactions by consensus, with the majority endorsing the validity of the transactions.¹⁶

Bitcoin was put into use in 2009. As Bitcoin increased in popularity and rival cryptocurrencies emerged (eg, Namecoin and Litecoin), the Commissioner published five public rulings on 17 December 2014. In summary, the first three rulings, which will be further discussed in Part III, provided that Bitcoin is not a foreign currency but a CGT asset and may be treated as trading stock under the trading stock provisions.¹⁷ The fourth ruling concerned the characterisation of Bitcoin as fringe benefits under the *Fringe Benefits Tax Assessment Act 1986* (Cth).¹⁸ It provides that Bitcoin provided by an employer on behalf of its employee is “property” fringe benefits, one of 12 categories.¹⁹ The last ruling expressed the Commissioner’s view that Bitcoin is not a currency within the meaning of “money”, and a transfer of Bitcoin would constitute a taxable supply for the *GST Act*.²⁰ Although digital currency was introduced as an alternative payment system, the Commissioner has taken the view that Bitcoin was subject to the tax treatments applied to property.

In 2015, the Senate Economics Reference Committee pointed out that characterising a supply of digital currency as a supply for GST purposes would lead to the imposition of GST twice on the same transaction: one on a supply of digital currency and the other on a supply of goods or services exchanged for the digital currency.²¹ The Productivity Commission noted the same and further expressed that the Commissioner’s characterisation of digital currency could potentially deter the use and distribution of digital currency in Australia and impede business innovations, thereby disadvantaging the Australian economy.²² Both the Senate Economics Reference Committee and the Productivity Commission suggested treating digital currency like money for GST purposes.²³

¹⁵ The white paper (Nakamoto, n 14) has the opening: “Commerce on the Internet has come to rely almost exclusively on financial institutions serving as trusted third parties to process electronic payments. While the system works well enough for most transactions, it still suffers from the inherent weaknesses of the trust based model.”

¹⁶ Bitcoin used the cryptographic proof known as “proof-of-work” originally invented to combat junk mail in the 1990s. See Cynthia Dwork and Moni Naor, “Pricing via Processing or Combatting Junk Mail” in Ernest F Brickell (ed), *Advances in Cryptology – Crypto ’92* (Springer, 1992) 139–147 (introducing the cryptographic proof for combating junk mail); Markus Jakobsson and Ari Juels, “Proofs of Work and Bread Pudding Protocols (Extended Abstract)” in Bart Preneel (ed), *Secure Information Networks* (Springer, 1999) 258–272 (formalising the name “proof-of-work”).

¹⁷ Australian Taxation Office, *Income Tax: Is Bitcoin a “Foreign Currency” for the Purposes of Division 775 of the Income Tax Assessment Act 1997?*, TD 2014/25, 17 December 2014; Australian Taxation Office, *Income Tax: Is Bitcoin a “CGT Asset” for the Purposes of Subsection 108-5(1) of the Income Tax Assessment Act 1997?*, TD 2014/26, 17 December 2017; Australian Taxation Office, *Income Tax: Is Bitcoin Trading Stock for the Purposes of Subsection 70-10(1) of the Income Tax Assessment Act 1997?*, TD 2014/27, 17 December 2014. There are the Compendium “TD 2014/25EC” for TD 2014/25 and TD 2014/27 and the Erratum “TD 2014/26ER1” for TD 2014/26. Trading stock is defined as “anything produced, manufactured or acquired that is held for purposes of manufacture, sale or exchange in the ordinary course of a business” and does not include a “Division 230 financial arrangement” defined under s 230-45 of the Act: in *Income Tax Assessment Act 1997* (Cth) s 70-10.

¹⁸ Australian Taxation Office, *Fringe Benefits Tax: Is the Provision of Bitcoin by an Employer to an Employee in Respect of Their Employment a Property Fringe Benefit for the Purposes of Subsection 136(1) of the Fringe Benefits Tax Assessment Act 1986?*, TD 2014/28, 17 December 2014.

¹⁹ Other types of fringe benefits are: car fringe benefits, car leasing fringe benefits, car parking fringe benefits, entertainment-related fringe benefits, expense payment fringe benefits, debt waiver fringe benefits, loan fringe benefits, housing fringe benefits, board fringe benefits, living-away-from-home allowance fringe benefits and residual fringe benefits.

²⁰ Australian Taxation Office, *Goods and Services Tax: The GST Implications of Transactions Involving Bitcoin*, GSTR 2014/3, 17 December 2014, [5]. More specifically, the Commissioner states that bitcoin is not “currency” because it is not issued by a government (see, eg, *Leask v Commonwealth* (1996) 187 CLR 579; 35 ATR 91) and does not fall under any other descriptions specified within the meaning of “money”. The ruling was consolidated on 21 January 2015 with the Erratum “GSTR 2014/3ER1”. The consolidated ruling was withdrawn on 18 December 2017.

²¹ Senate Economics References Committee, *Digital Currency – Game Changer or Bit Player* (Report, Commonwealth of Australia, 2015) 28 (*Digital Currency – Game Changer or Bit Player*).

²² Productivity Commission, *Business Set-up, Transfer and Closure* (Inquiry Report No 75, Commonwealth of Australia, 2015) 241 (*Business Set-up, Transfer and Closure*).

²³ *Digital Currency – Game Changer or Bit Player*, n 21, 34 (providing Recommendation 1); *Business Set-up, Transfer and Closure*, n 22, 32 (providing Recommendation 9.4).

The Australian government was receptive to the recommendations of the Senate Economics References Committee and the Productivity Commission.²⁴ There were new developments around the world. For example, the European Court of Justice (ECJ) ruled in October 2015 that an exchange of virtual currency for fiat currency was an “exempt” supply because the exchange constituted a financial transaction.²⁵ The decision influenced the countries in the European Union (EU) to exclude virtual currency transactions from EU value-added taxes although some divergence remained regarding virtual currency-related services (eg, online wallet services and exchange services).²⁶ Meanwhile, Japan declared that digital currency used as a means of exchange would not be subject to its consumption tax, effective from 1 July 2017.²⁷

In 2017, the Australian government introduced a definition of “digital currency” in the *GST Act*.²⁸ This definition is outlined at the beginning of this article and remains in effect. The existing meaning of “money” was then inclusive of “Australian or foreign currency, promissory notes, bills of exchange, any negotiable instruments used or circulated as currency, postal notes, money orders and whatever is supplied as payment by way of credit or debit card, crediting or debiting an account or creating or transfer of a debt”.²⁹ This definition, however, did not include “digital currency”.³⁰

Even with the separate definitions of digital currency and money, their GST treatments became aligned for supplies and payments made from 1 July 2017.³¹ Specifically, a supply of digital currency was made, not a supply on which GST shall be imposed unless the digital currency was provided as consideration for a supply of money or digital currency.³² Likewise, a supply of money is not a taxable supply unless the money is provided as consideration for a supply of money or digital currency.³³ When either digital currency or money is supplied because of its use in exchange for money or digital currency, the first-mentioned digital currency or money will be a financial supply.³⁴ A financial supply is input-taxed, which means that no GST is imposed on the supply, and no GST can be claimed on acquisitions made to provide the supply.³⁵

²⁴ See, eg, Australian Government Treasury, *Backing Australian FinTech* (Commonwealth of Australia, 2016) 22 (stating that “[t]he Government is committed to addressing the ‘double taxation’ of digital currencies and will work with the industry on legislative options to reform the law relating to GST as it is applied to digital currencies”); Kelly O’Dwyer, Minister for Small Business and Assistant Treasurer, “Government Responses to Senate Inquiry into Digital Currency” (Press Release, 5 May 2016) (stating that “consumers should not be subject to the GST twice when using digital currency to purchase goods or services”).

²⁵ *Skatteverket v Hedqvist* (European Court of Justice, C-264/14, ECLI:EU:C:2015:718, 22 October 2015).

²⁶ See *Taxing Virtual Currencies*, n 9, 32–39.

²⁷ This was effected by the amendments to the *Fund Settlement Law* (Japan) in May 2016. See Deloitte, *2017 Tax Reform Proposals* (Inbound Tax Alert, December 2016) 8.

²⁸ By *Treasury Laws Amendment (2017 Measures No 6) Act 2017* (Cth). See the background of the legislative amendments in Ilya Isakov, “Australia’s Tumultuous Road Towards Taxation of Digital Currencies” (2018) 17(3) *AGSTJ* 145.

²⁹ *A New Tax System (Goods and Services Tax) Act 1999* (Cth) s 195-1 (definition of “money”). In fact, the Supreme Court of New South Wales found that Bitcoin was not money for the *Corporations Act 2001* (Cth) in *Commissioner of the Australian Federal Police v Bigatton* [2020] NSWSC 245.

³⁰ *A New Tax System (Goods and Services Tax) Act 1999* (Cth) s 195-1 (definition of “money”). The definition of money also provides that the following items are not money: collector’s pieces, investment articles, items of numismatic interest and currencies the market value of which exceed their stated value as legal tender of the country of issue.

³¹ Explanatory Material, *Treasury Laws Amendment (2017 Measures No 6) Bill 2017* (Cth) [1.16].

³² *A New Tax System (Goods and Services Tax) Act 1999* (Cth) s 9-10(4). See further the corresponding provision for acquisitions in s 11-10(3) of this Act, which states that “acquisition does not include: (a) an acquisition of money unless the money is provided as consideration for a supply that is a supply of money or digital currency; or (b) an acquisition of digital currency unless the digital currency is provided as consideration for a supply that is a supply of digital currency or money”.

³³ *A New Tax System (Goods and Services Tax) Act 1999* (Cth) s 9-10(4).

³⁴ *A New Tax System (Goods and Services Tax) Regulation 2019* (Cth) s 40-5-09(3) Item 9 (“Australian currency, the currency of a foreign country, digital currency or an agreement to buy or sell any of these 3 things”).

³⁵ *A New Tax System (Goods and Services Tax) Act 1999* (Cth) s 40-5(1). An input-taxed supply can be distinguishable from a GST-free supply in that acquisitions made for the supply of a GST-free supply can be credited to either reduce the amount of GST payable to the government or receive a refund if no amount of GST is payable.

As a result of the legislative amendments, transactions involving digital currency were no longer taxed twice and on 18 December 2017 the Commissioner withdrew GST Ruling GSTR 2014/3.³⁶

The legislative modifications can be explained by the policy design of the *GST Act*. Under a theoretically pure consumption tax model, all consumptions shall be accounted for periodically. This is impractical due to the difficulty of precisely valuing yearly consumptions. Instead, consumptions are recognised in whole at the point of making initial supplies, and subsequent consumptions are ignored. In addition, consideration paid for the exchange of goods and services is not subject to GST. Apart from double taxation of the duplicate transactions, money is not consumed, or used up over time.

The reason why financial supplies are exempted from GST impost is that their value cannot be measured per transaction. Conversely, a financial supply provided by way of money or otherwise is a taxable supply because a financial supply refers to services offered in financial transactions. A bank provides lower interest rates on deposits and higher rates on lending. The bank's financial services are the spread between lower interest payments and higher interest receipts. However, the extent of services cannot be referable to individual transactions but may be measured only by examining all of the bank's transactions. Almost no countries, including Australia, impose GST or value-added tax on financial services. Treating digital currency in the same manner as money for the *GST Act* means that transactions involving digital currency are eliminated from the GST net.

Notably, the definition of "digital currency" in the *GST Act* is not sufficient to catch all digital financial assets based on decentralised ledger technology (DLT) and cryptography. Since Bitcoin was introduced to improve the safety and security of transactions and lower transaction costs, the value of blockchain-based assets was exponentiated when Vitalik Buterin, a Russian-Canadian computer programmer, then aged 21, launched the Ethereum project in 2015.³⁷ Unlike the Bitcoin blockchain, which records, stores and transfers the details necessary to use Bitcoin as a medium of exchange, the Ethereum blockchain housed programming codes, making the blockchain possible to be used as a software development platform.

In a 2020 report, the Organization for Economic Cooperation and Development (OECD) surveyed 23 selected jurisdictions to find that the most common terminology used by regulators was virtual currency and others included Bitcoin, digital currency, electronic currency, cryptocurrency, DLT asset, virtual asset, crypto-asset, digital financial asset and digital asset.³⁸ The OECD states that the most comprehensive terminology is "crypto-assets" and categorises them into three broad categories based on economic function: payment tokens based on DLT, which serve as a unit of account or means of payment; utility tokens that allow access to specific future goods or services; and security tokens which represents a contractual right to cash or another financial asset.³⁹ From the standpoint of the International Financial Reporting Standards (IFRIC), the three categories of crypto-assets are generally characterised as intangible assets, prepayments, and financial assets, respectively.⁴⁰ Similarly, economic function is essential, particularly in the context of income tax. Depending on the economic function of the crypto-asset, tax treatments can differ.

³⁶ Australian Taxation Office, *Goods and Services Tax: The GST Implications of Transactions Involving Bitcoin – Notice of Withdrawal*, GSTR 2014/3W, 18 December 2017).

³⁷ Before launching the Ethereum project, Vitalik Buterin published a white paper titled "Ethereum: A Next-generation Smart Contract and Decentralized Application Platform" (White Paper 3(37), January 2014) <https://finpedia.vn/wp-content/uploads/2022/02/Ethereum_white_paper-a_next_generation_smart_contract_and_decentralized_application_platform-vitalik-buterin.pdf>.

³⁸ *Taxing Virtual Currencies*, n 9, 9–10.

³⁹ *Taxing Virtual Currencies*, n 9, 12, 35.

⁴⁰ The IFRIC states that cryptocurrency has the characteristics of an intangible asset under IAS 38 (ie, an identifiable non-monetary asset without physical substance) and is not a medium for measuring all other transactions in financial statements; however, cryptocurrency may be characterised as inventories under IAS 2, prepayments (or non-cash consideration in exchange for goods or services) under IFRS 15 or financial assets under IFRS IAS 38 (see *Taxing Virtual Currencies*, n 9, 15–16).

III. COMMISSIONER'S RULINGS FOR INCOME TAXATION

The OECD notes that, unlike consumption taxes, the income tax treatments of crypto-assets are diverse across countries.⁴¹ Crypto-assets can have hybrid characteristics or the combined function of payment, utility and security.⁴² Alternatively, they may not necessarily fit neatly into any of these three functional categories. Different income tax treatments apply to various events and transactions that arise from the time of creation to the time of disposal or loss of crypto-assets. Most countries treat virtual currencies as intangible property or financial assets, with the notable exception of Italy, which treats virtual currencies as foreign currencies following the GST characterisation by the ECJ.⁴³

In Australia, the Commissioner expresses his view on the income tax treatments of Bitcoin in several types of guidance, including the three income tax rulings released in 2014.⁴⁴ The Commissioner determines in Taxation Determination TD 2014/26 that Bitcoin is a "CGT asset".⁴⁵ A "CGT asset" is defined broadly as "(1) any kind of property, or (2) a legal or equitable right that is not property".⁴⁶ Many kinds of money defined in the *GST Act* are CGT assets (eg, foreign currencies, promissory notes, bills of exchange, and bank accounts⁴⁷).⁴⁸ However, the Australian currency is not a CGT asset,⁴⁹ and foreign currencies may be subject to the forex regime, instead of the CGT regime.

It appears that the Australian Taxation Office (ATO) does not distinguish Bitcoin from other digital currencies, namely "Altcoins"⁵⁰ and treats Altcoins as CGT assets analogously to Bitcoin. This is evident in the number of private rulings that the ATO has issued considering the tax characterisation of coins other than Bitcoin. Notably, there is no particular income tax treatment that exclusively applies to money

⁴¹ *Taxing Virtual Currencies*, n 9, Ch 2.

⁴² *Taxing Virtual Currencies*, n 9, 7; see, similarly, Niklas Schmidt et al (eds), *Taxation of Crypto Assets* (Wolters Kluwer, 2021) 12. Ooi argues that tax laws shall not blindly adopt the three classifications of crypto-assets and hybrids may exist: in Vincent Ooi, "A Framework for Understanding the Taxation of Digital Tokens" (2021) 50(4) *AT Rev* 260. Digital tokens may be assets loaned, payments for as borrowing costs or used to record transactions: in Vincent Ooi, "Tax Challenges in Debt Financing Involving Digital Tokens" (2022) 17(4) *Capital Markets Law Journal* 1.

⁴³ *Taxing Virtual Currencies*, n 9, 23; Schmidt et al, n 42, 424 ("The Italian tax authority specified that a crypto asset has the nature of means of payment: crypto asset is a type of currency without legal tender, and it is characterized by the absence of materiality. This classification applies to payment tokens only, and no definition has been specifically issued by the Italian tax authority with respect to security or utility tokens"). The ECJ decision was mentioned in *Skatteverket v Hedqvist* (European Court of Justice, C-264/14, ECLI:EU:C:2015:718, 22 October 2015). The OECD notes that Belgium, Cote d'Ivoire and Poland also treat virtual currencies as currencies: in *Taxing Virtual Currencies*, n 9. See further Johanna Jacques, "E-money and Trusts: A Property Analysis" (2022) 138(October) *Law Quarterly Review* 605 (urging to clarify property relations underlying the issuance of e-money).

⁴⁴ See the Commissioner's income tax rulings in n 17.

⁴⁵ Australian Taxation Office, *Income Tax: Is Bitcoin a "CGT Asset" for the Purposes of Subsection 108-5(1) of the Income Tax Assessment Act 1997?*, TD 2014/26, 17 December 2017, [1].

⁴⁶ *Income Tax Assessment Act 1997* (Cth) s 108-5(1).

⁴⁷ See how the CGT regime operates in relation to the acquisition and disposal of foreign currency in "How CGT Affects Foreign Currency Transactions" (1986) 50 *Chartac Taxation Report* 2. In *Excellar Pty Ltd v Federal Commissioner of Taxation* (2015) 98 *ATR* 965; [2015] *AATA* 282, the tribunal held that cash held in a bank account was a CGT asset. Cash held in bank is a chose in action for the depositor because it is a debt owed by the bank to the depositor.

⁴⁸ The term "money" is defined in the income tax legislation "in relation to the consideration for a taxable supply" to have the same meaning as in the *A New Tax System (Goods and Services Tax) Act 1999* (Cth); "money equivalent" is defined as "(a) a right to receive money or something that is a money equivalent under this definition; or (b) a financial arrangement". See *Income Tax Assessment Act 1997* (Cth) s 995-1(1) (definitions of "money" and "money equivalent"). The definition of "money equivalent" provides that a financial arrangement means a financial arrangement within the meaning of s 230-45 of the same Act.

⁴⁹ The Australian currency is a unit of measure for Australian income tax purposes. See Australian Taxation Office, *Income Tax: Capital Gains: Is Australian Currency a CGT Asset under Section 108-5 of the Income Tax Assessment Act 1997 (ITAA 1997) If It Is Used as Legal Tender to Facilitate a Transaction?*, TD 2002/25, 20 November 2022.

⁵⁰ See the ATO's guidance in *Crypto Asset Investments* <<https://www.ato.gov.au/Individuals/Investments-and-assets/Crypto-asset-investments>>. In particular, chain splits were discussed in the context of Bitcoin, Bitcoin Cash and Ethereum hard forks without distinguishing them for different tax treatments: in "Chain Splits" on the ATO website under *Crypto Chain Splits* <<https://www.ato.gov.au/individuals/Investments-and-assets/crypto-asset-investments/crypto-chain-splits/#Chainsplits>>. In November 2022,

or money equivalent, or potentially to digital currencies. An asset may be a CGT asset but treated under special provisions or a different regime (eg, trading stock rules).

In Taxation Determination TD 2014/26, the Commissioner states that applying the CGT regime to Bitcoin is appropriate because Bitcoin is generally used as a means of exchange or kept as a commodity (ie, speculative investment).⁵¹ However, the Commissioner also notes the potential application of special CGT provisions for “personal use” assets, defined as CGT assets that are used or kept mainly for personal use or enjoyment.⁵² The Commissioner considers that Bitcoin may be a personal use asset if an individual taxpayer uses it to make online purchases for their personal needs (eg, clothing or music).⁵³ If a digital coin is characterised as a personal use asset, any capital gain of the coin acquired for \$10,000 or less is disregarded.⁵⁴ If the coin is disposed of at a loss or lost, the loss shall be disregarded irrespective of how much the coin was acquired for.⁵⁵

In certain circumstances, other income tax provisions may apply depending on the economic use of Bitcoin. For example, Bitcoin may be acquired with a view to making a speculative, short-term profit,⁵⁶ which results in any sale proceeds being assessable as ordinary income when derived and expenses likely being deductible when incurred.⁵⁷ In other words, income and expenses may be recognised in different tax years, unlike the net effect recognisable under the CGT regime.

The Commissioner considers in Taxation Determination TD 2014/27 that Bitcoin can also be trading stock.⁵⁸ Trading stock is “anything produced, manufactured or acquired that is held for the purposes of manufacture, sale or exchange in the ordinary course of a business”.⁵⁹ Where Bitcoin was acquired

the digital currency market recorded 21,844 different types of digital currencies, with an estimated market capitalisation of approximately USD 852 billion. See Josh Howarth, *How Many Cryptocurrencies are There in 2023?* (25 November 2022) <<https://explodingtopics.com/blog/number-of-cryptocurrencies>> (providing the number of digital currencies in the market); YCharts, *Bitcoin Market Cap* (29 November 2022) <https://ycharts.com/indicators/bitcoin_market_cap> (providing the estimated value of the market capitalisation). Yet, Bitcoin remains as the most popular digital currency taking up nearly 40% of the digital currency market capitalisation. Ethereum is ranked the second in popularity among all digital currencies traded in the market.

⁵¹ Australian Taxation Office, *Income Tax: Is Bitcoin a “CGT Asset” for the Purposes of Subsection 108-5(1) of the Income Tax Assessment Act 1997?*, TD 2014/26, 17 December 2017, [18]. The US Internal Revenue Service also treats Bitcoin as a capital asset. However, whether to apply the CGT provisions is established negatively by identifying what are not capital assets. The following are not capital assets: inventory, real or depreciable property, intellectual property, accounts or notes receivable, government publications, hedging transactions, derivative financial instruments and supplies (IRC § 1221): in James K Smith and Judith Hora, “State and Local Tax Concerns Regarding Digital Currency” (2014) 33(1) *Journal of State Taxation* 29.

⁵² Defined in *Income Tax Assessment Act 1997* (Cth) s 108-20(2)(a).

⁵³ Australian Taxation Office, *Income Tax: Is Bitcoin a “CGT Asset” for the Purposes of Subsection 108-5(1) of the Income Tax Assessment Act 1997?*, TD 2014/26, 17 December 2017, [20]. The ATO has issued guidance that a crypto-asset used relatively quickly to buy items for personal use or consumption is more likely to be a personal use asset, and a crypto-asset held for some time before use is less likely to be personal use asset. See Australian Taxation Office, *Crypto as a Personal Use Asset* <<https://www.ato.gov.au/individuals/Investments-and-assets/crypto-asset-investments/crypto-as-a-personal-use-asset/>>. Information on the ATO website gives no legal protection against tax shortfalls when the information turns out to be incorrect: see Australian Taxation Office, *How Our Advice and Guidance Protects You* <<https://www.ato.gov.au/general/ato-advice-and-guidance/how-our-advice-and-guidance-protects-you>>.

⁵⁴ *Income Tax Assessment Act 1997* (Cth) s 118-10(3).

⁵⁵ *Income Tax Assessment Act 1997* (Cth) s 118-20(1).

⁵⁶ Australian Taxation Office, *Income Tax: Is Bitcoin a “CGT Asset” for the Purposes of Subsection 108-5(1) of the Income Tax Assessment Act 1997?*, TD 2014/26, 17 December 2017, [22]–[23]. This follows several authorities, such as *Commissioner of Taxation (Cth) v Whitfords Beach Pty Ltd* (1982) 150 CLR 355; 12 ATR 692 and *Commissioner of Taxation v Myer Emporium Ltd* (1987) 163 CLR 199; 18 ATR 693, in which income from isolated transactions was considered ordinary income under *Income Tax Assessment Act 1997* (Cth) s 6-5. See the discussion of isolated transactions in the context of coin splits in Christina Allen and David G Chamberlain, “Lost and Found Coins: Cryptocurrency Chain Splits in Australia” (2023) 38(4) *Australian Tax Forum* 509.

⁵⁷ Deductions are provided in *Income Tax Assessment Act 1997* (Cth) s 8-1 (illustrating general deductions).

⁵⁸ Australian Taxation Office, *Income Tax: Is Bitcoin Trading Stock for the Purposes of Subsection 70-10(1) of the Income Tax Assessment Act 1997?*, TD 2014/27, 17 December 2014, [1]. The Commissioner states that Bitcoin is regarded as property for tax purposes, and Bitcoin held for the purposes above shall be subject to trading stock provisions ([13]–[14]).

⁵⁹ *Income Tax Assessment Act 1997* (Cth) 70-10(1)(a).

as trading stock, a capital gain or loss made from Bitcoin will be disregarded.⁶⁰ Conversely, suppose Bitcoin was acquired as a CGT asset and later converted to trading stock, the taxpayer is given a choice for the trading stock valuation method between “cost” or “market value”.⁶¹ If cost is elected, the taxpayer disregards a capital gain or loss arising from the conversion of Bitcoin’s economic use.⁶² If the market value is chosen, the conversion arises and there is simultaneously a deemed sale of a CGT asset and deemed purchase of trading stock. In this case, the taxpayer must recognise a capital gain or loss arising from the deemed sale, with the proceeds equal to the market value of Bitcoin,⁶³ and include that market value in the trading stock calculation.

Although foreign currency is a CGT asset,⁶⁴ gains and losses arising from foreign exchange fluctuations are recognised under Div 775 of the *ITAA 1997*. The Commissioner considers in Taxation Determination TD 2014/25 that Bitcoin is not a foreign currency for the purposes of Div 775. The definition of “money” is still sourced in common law.⁶⁵ Whether or not the forex regime applies to Bitcoin depends on whether it is “foreign currency” for the purposes of the forex regime.⁶⁶ Foreign currency is defined as “a currency other than Australian currency”⁶⁷ and was understood as the counterpart of Australian currency under the *Currency Act 1965* (Cth), that is, “a currency legally recognised and adopted under the laws of a country as the monetary unit and means of discharging monetary obligations for all transactions and payments in that country”.⁶⁸ Because Bitcoin was neither recognised nor adopted in other countries, the Commissioner concluded that Bitcoin was not a foreign currency.⁶⁹

IV. SERIBU AND THE FOREX REGIME

The forex regime recognises the Australian dollar value of foreign currency fluctuations that occur each year due to forex realisation events (FREs).⁷⁰ The forex regime was codified into Australian income

⁶⁰ *Income Tax Assessment Act 1997* (Cth) s 118-25(1)(a).

⁶¹ *Income Tax Assessment Act 1997* (Cth) s 70-30(1)(a).

⁶² *Income Tax Assessment Act 1997* (Cth) s 118-25(2).

⁶³ *Income Tax Assessment Act 1997* (Cth) s 104-220 (illustrating CGT event K4).

⁶⁴ The statutory examples of a CGT asset expressly include foreign currency: in *Income Tax Assessment Act 1997* (Cth) s 100-25(3); formerly, *Income Tax Assessment Act 1936* (Cth) s 160A(b).

⁶⁵ The meaning of money was considered in *Travellex Ltd v Commissioner of Taxation (Cth)* (2008) 71 ATR 216, 222–223 [25]; [2008] FCA 1961 (stating “Money is any generally accepted medium of exchange for goods and services and for the payment of debt. ... Money is that which passes freely from hand to hand throughout the community in final discharge of debts and full payment for commodities, being accepted equally without reference to the character or credit of the person who offers it and without the intention of the person who receives it to consume it or apply it to any other use than in turn to tender it to others in discharge of debts or payment for commodities.”). This formulation came from the old English criminal law case of *Moss v Hancock* [1899] 2 QB 111 and is arguably still good law in the United Kingdom (UK). Channell J relied on the definition of “money” from Francis A Walker, *Money in Its Relation to Trade and Industry* (H. Holt, 1879) 4: “Money is that which passes freely from hand to hand throughout the community in final discharge of debts and full payment for commodities, being accepted equally without reference to the character or the credit of the person who offers it and without the intention of the person who receives it to consume it or apply it to any other use than in turn to tender it to others in discharge of debts or payment for commodities” (116). See also *Messenger Press Proprietary Ltd v Federal Commissioner of Taxation* (2012) 90 ATR 69, 116 [196]; [2012] FCA 756 (stating “There was no evidence that the promissory notes had taken on the quality of being able to be used throughout the community for the discharge of debts and, if they did have that quality, any reasonable person would certainly make inquiries as to the ‘character or credit’ of the issuer before accepting such a note.”).

⁶⁶ Australian Taxation Office, *Income Tax: Is Bitcoin a “Foreign Currency” for the Purposes of Division 775 of the Income Tax Assessment Act 1997?*, TD 2014/25, 17 December 2014, [25].

⁶⁷ *Income Tax Assessment Act 1997* (Cth) s 995-1(1) (definition of “foreign currency”).

⁶⁸ Australian Taxation Office, *Income Tax: Is Bitcoin a “Foreign Currency” for the Purposes of Division 775 of the Income Tax Assessment Act 1997?*, TD 2014/25, 17 December 2014, [32]. See further *Leask v Commonwealth* (1996) 187 CLR 579; 35 ATR 91 (discussing Australian currency under the *Currency Act 1965* (Cth)).

⁶⁹ Australian Taxation Office, *Income Tax: Is Bitcoin a “Foreign Currency” for the Purposes of Division 775 of the Income Tax Assessment Act 1997?*, TD 2014/25, 17 December 2014, [33].

⁷⁰ *Income Tax Assessment Act 1997* (Cth) Div 775.

tax laws in 2003. The meaning of foreign currency was seriously considered when Bitcoin came into existence.⁷¹

A. Character Distinction between Revenue and Capital

Before the introduction of the forex regime in 2003, forex gains and losses were characterised as either revenue or capital in nature based on common law. Forex gains and losses directly referable to circulating capital (eg, trading stock) were on revenue account. On the other hand, they were on capital account if they were attributable to a business entity or an organisation established for a profit-yielding structure, as opposed to regular returns or the business process by which regular returns were to be earned.⁷²

However, the common law characterisation of forex gains and losses as being either on revenue or capital account raised questions about borrowing arrangements. Forex gains and losses made on money borrowed in foreign currencies were deemed to be of a capital nature even if they were used to obtain circulating capital (ie revenue account assets). In contrast, gains and losses made on the money borrowed and subsequently lent by a finance company were on revenue account.⁷³ Both forex gains and losses arose from financing that required payments over time. In many situations, they were generally the finance costs under foreign currency arrangements, whether the arrangements were separately written or integrated with the underlying transaction.⁷⁴ However, forex gains and losses of a capital nature were

⁷¹ An exception is when Euro was introduced. See, eg, Stephen J Gates, “Introduction of the Euro: Tax Aspects” (1998) 9(4) JBFLP 320.

⁷² See, eg, *Texas Co (Asia) Ltd v Commissioner of Taxation (Cth)* (1940) 63 CLR 382 (deductible forex loss in relation to the purchase of petroleum products used as trading stock); *International Nickel Australia Ltd v Commissioner of Taxation (Cth)* (1977) 137 CLR 347; 7 ATR 739 (assessable forex gain in relation to the purchase of Nickel products imported for sale in Australia); *Commissioner of Taxation (Cth) v Cadbury-Fry Pascall (Australia) Ltd* (1979) 37 FLR 126; 10 ATR 55 (assessable forex gain in relation to the purchase of raw materials where the taxpayer’s parent company in the United Kingdom paid the bills in the first instance and the amounts paid by the parent company, kept in the taxpayer’s loan account in Australian currency, were settled in the latter part of the relevant income year when the UK currency was devaluated against Australian dollars, giving rise to a forex gain). In contrast, the taxpayer was not allowed to deduct the forex loss in *Caltex Ltd v Commissioner of Taxation (Cth)* (1960) 106 CLR 205. In this case, the taxpayer had an exclusive supplier that was owned and controlled by Texas Corporation of New York (TCNY). TCNY, together with the Standard Oil Company of California, formed a new company to takeover the old supplier’s operations including existing indebtedness. The court stated that the taxpayer did not suffer any loss of Australian currency to be entitled to claim a deduction upon the transfer of its debt from the old supplier to the new supplier. The taxpayer was not conceded to have discharged the indebtedness to its supplier. The character distinction between revenue and capital is based on the substance and reality of relevant transactions (*Thiess Toyota Pty Ltd v Commissioner of Taxation (Cth)* [1978] 1 NSWLR 723; (1978) 9 ATR 11).

⁷³ The distinction between capital and revenue was particularly confusing when courts attempted to characterise forex gains and losses based on how the borrowings were subsequently used: H Bernard Mayer, “Foreign Exchange Fluctuations: Some Tax Implications” (1968) 16(2) *Canadian Tax Journal* 78; JJ Hockley, “Exchange Gains: Capital or Income” (1980) 9(1) AT Rev 23. In *Armco (Aust) Ltd v Commissioner of Taxation (Cth)* (1948) 76 CLR 584; John Chown, “Foreign Exchange Gains and Losses: Are Australians Facing an Old Tax Trap?” (1985) 14(4) AT Rev 234. In ascertaining the character of a promissory note issued in a similar amount to the indebtedness that the taxpayer incurred in purchasing goods on credit in US currency, the Full High Court was equally divided in opinions. The decision was made not to allow a deduction for the exchange loss under *Judiciary Act 1903–1947* (Cth) s 23(2)(a) which provides that, if the court is equally divided in opinion, the decision appealed from a Justice of the High Court shall be affirmed. Further in *AVCO Financial Services Ltd v Commissioner of Taxation (Cth)* (1982) 150 CLR 510; 13 ATR 63, the court assigned a revenue nature to the forex gains and losses that arose from the money borrowed from overseas by a finance company, subsequently used to make loans to the company’s customers in Australia. See the case note in JJ Hockley, “The Deductibility of Exchange Losses” (1982) 11 AT Rev 217. In contrast, the forex gains and losses made from the foreign currency borrowed, which was primarily used by a lending and financing business to strengthen its financial standing and liquidity status, were on capital account in *Commercial & General Acceptance Ltd v Commissioner of Taxation (Cth)* (1977) 137 CLR 373; 7 ATR 716. See further AJ Myers, “Taxation of Exchange Gains” (1977) 6(4) AT Rev 228 (comparing the case with *International Nickel Australia Ltd v Commissioner of Taxation (Cth)* (1977) 137 CLR 347; 7 ATR 739). In *Commissioner of Taxation (Cth) v Hunter Douglas Ltd* (1983) 78 FLR 182; 14 ATR 629, the court stated that the character distinction of forex gains or losses for the money borrowed is made by reference to if the borrowing was purported to support the structure of a business or for on-lending of the money. See the case note in Cynthia Coleman, “Exchange Gains and Losses after the Hunter Douglas Ltd. Case” (1984) 13(3) AT Rev 133.

⁷⁴ See Commonwealth, *Parliamentary Debates*, House of Representatives, 28 November 1986, 3946 (Christopher John Hurford) (stating “There are clear economic advantages in treating all foreign exchange gains and losses in respect of borrowings and loans

not recognised for tax purposes; Australia's CGT regime only came about in 1986, effective for assets acquired from 20 September 1985.⁷⁵

Due to the historical unequal treatment of forex gains and losses based on their revenue or capital characterisation, the government considered that treating all forex gains and losses equally would bring clear economic advantages⁷⁶ and, in 1987, implemented Div 3B of the *Income Tax Assessment Act 1936* (Cth) to recognise forex gains and losses of a capital nature.⁷⁷ Division 3B applied to contracts entered into on or after 19 February 1986.⁷⁸ The recognition time of forex gains and losses under Div 3B was upon realisation, which was practically the same as when forex gains and losses of a revenue nature were accounted for tax purposes.

Division 3B sought to calculate forex gains and losses that arose from the time difference between paying instalments and when the taxpayer became liable to pay foreign currency and between paying for an asset and when the taxpayer became liable to pay, or had a right to receive, foreign currency in respect of the asset. Forward cover contracts and other hedging contracts were treated as part of the principal contracts.⁷⁹ Assignments and transfers under a contract entered into after Div 3B came into effect were taken as new contracts, given that the arrangement had no tax avoidance motive.⁸⁰ Similarly, rolled-over or extended loans were accepted as new loans unless the original loan contractually required the taxpayer to roll over or extend the loan.⁸¹ If a taxpayer exercised an option to renew a loan in whole or in part, the loan was also considered a new loan.⁸²

Division 3B was not drafted to catch all forex gains and losses of a capital nature. In *Federal Commissioner of Taxation v Energy Resources of Australia Ltd*⁸³ (ERA), the taxpayer used proceeds from the newly issued promissory notes to discharge obligations under the promissory notes that matured (except for the first issue used to discharge the taxpayer's other liabilities). The High Court held that forex gains and losses associated with the borrowings under the Euronote facility were not assessable or deductible under

in the same way, given the economic similarity between interest payments and expected exchange rate effects over the period of a foreign currency-denominated debt contract.”)

⁷⁵ *Income Tax Assessment Amendment (Capital Gains) Act 1986* (Cth).

⁷⁶ Commonwealth, *Parliamentary Debates*, House of Representatives, 28 November 1986, 3946 (Christopher John Hurford). Similarly, Akbari argued that analysing forex gains and losses separately from their underlying transactions will lead to a more internally coherent and less distortionary tax policy framework: in Sina Akbari, “Foreign Currency Considerations in Tax Law and Policy” (2008) 66(1) *University of Toronto Faculty of Law Review* 1.

⁷⁷ *Taxation Laws Amendment Act 1987* (Cth) s 9 (inserting *Income Tax Assessment Act 1936* (Cth) Div 3B). The effect of the legislative amendments is explained in ICF Spry, “Foreign Currency Exchange Gains and Losses: Recent Legislative Amendments” (1987) 16 AT Rev 93; PG Callaghan, “Taxation Treatment of Exchange Gains and Losses” (1988) 23(2) *Taxation in Australia* 70; David Mouritz, “Taxation Treatment of Foreign Currency Exchange Gains and Losses on Borrowings by Australian Resident Taxpayers” (1991) 2(2) *Revenue Law Journal* 33 (illustrating in the context of substance versus form).

⁷⁸ *Income Tax Assessment Act 1936* (Cth) s 82V(1) (meaning of “eligible contract”). In *Case No VT 92/5* (1994) 27 ATR 1205, the court held that the taxpayer made purchases at the time when contracts were entered into with foreign suppliers (and not when shipments were made according to the bills of lading) for *Income Tax Assessment Act 1936* (Cth) Div 3B.

⁷⁹ Now in *Income Tax Assessment Act 1997* (Cth) s 118-55. In *Australian National Hotels Ltd v Commissioner of Taxation* (Cth) (1988) 19 FCR 234; 19 ATR 1575, the taxpayer was allowed to deduct the premiums (generally of a capital nature) paid under an insurance contract because the court regarded the premiums as part of the costs incurred for a foreign currency loan to build a casino. The insurance contract was entered into against potential exchange losses which might arise from the foreign currency borrowing. Amalgamating the economic effect of hedging contracts was not new to the Australian income tax law. See further the tax treatment of hedging transactions, swaps and options under *Income Tax Assessment Act 1936* (Cth) Div 3B in Mark Ferrier, “Hedging of Foreign Currency” (1997) 26(2) AT Rev 83.

⁸⁰ *Income Tax Assessment Act 1936* (Cth) s 82V(3).

⁸¹ *Income Tax Assessment Act 1936* (Cth) s 82W; Australian Taxation Office, *Foreign Exchange Capital Gains and Losses: When Is a Loan “Wholly or Partly Rolled Over” under ITAA 1936 s 82W*, TD 93/150, 5 August 1993. In *Stanolis v Commissioner of Taxation* (Cth) (1998) 41 ATR 302, the court held that interest rate reconsideration did not constitute a rollover of the relevant loan because it did not raise demand for repayment of the loan.

⁸² *Income Tax Assessment Act 1936* (Cth) s 82W. Note regular adjustment of the interest rate is of itself not taken as a new loan (eg, revolving note issues).

⁸³ *Federal Commissioner of Taxation v Energy Resources of Australia Ltd* (1996) 185 CLR 66; 33 ATR 52.

Div 3B because the taxpayer did not convert the US currency notes to Australian dollars.⁸⁴ Conversely, foreign exchange gains and losses attributable to the discounts were of a revenue nature, and Div 3B had no application.

Subsequently, in *Victoria Co Ltd v Deputy Commissioner of Taxation*,⁸⁵ the taxpayer contended that foreign exchange losses made from discharging a loan using the proceeds of another loan were deductible. However, the court followed the precedent in *ERA* to deny the deduction of the notional forex losses. While the Commissioner had issued Taxation Ruling TR 93/8 to allow deductions of notional forex losses by way of foreign currency fluctuations,⁸⁶ the taxpayer could not rely on the ruling because the taxpayer's loan was taken out before the ruling was issued. The ruling had been withdrawn after the decision in *ERA* was handed down.

Further, in *Federal Commissioner of Taxation v Messenger Press Pty Ltd*,⁸⁷ the court held that forex losses that arose from transactions involving the settlement of foreign currency-denominated debts with foreign currency-denominated promissory notes were deductible under Div 3B. This was not inconsistent with the decisions in the cases mentioned above because the foreign currency-denominated promissory notes were obtained in return for increased Australian currency borrowings or assets denominated in Australian dollars.

B. Consolidated Forex Rules

Interest in the taxation of financial arrangements arose in the early to mid-1980s when diverse tax minimisation schemes involving financial arrangements were introduced to the market.⁸⁸ In the early 1990s, the ATO began dialogue with industry about the taxation of financial arrangements, including foreign currency debt arrangements.⁸⁹ In *Coles Myer Finance Ltd v Commissioner of Taxation*,⁹⁰ a promissory note was issued at a discount. The court ruled that the liability on the promissory note arose when the note was issued, not when the note matured and the face value was paid. In contrast, similar to interest payments on borrowing, discounts were deductible in the year in which expenses were incurred in gaining or producing assessable income.⁹¹ In practice, the discounts would generally be deductible evenly across the term of a note. It was, however, arguable that deductions would be allowed upon the issue of promissory notes when the liability under promissory notes was discharged upon maturity, which would raise uncertainty about the tax treatment of forex gains and losses.

In 1999, the Review of Business Taxation, commonly known as the Ralph Review, released a report including recommendations for the taxation of financial arrangements.⁹² In this report, the Ralph Review

⁸⁴ *Federal Commissioner of Taxation v Energy Resources of Australia Ltd* (1996) 185 CLR 66; 33 ATR 52; 96 ATC 4536, 4540. See the case discussion in D Hanlon, "Foreign Currency Translation: The Beginning of a New ERA" (Paper presented at the AAANZ Conference, Adelaide, 3–6 July 1998); Jim Richardson, "Bill Discounts and Foreign Currency Exchange Gains and Losses" (1996) 48(4) *Australian Company Secretary* 342; Geoff Petersson and Nick Petroulias, "Foreign Exchange: The ERA Decision" (1997) 5(3) *Taxation in Australia* 133.

⁸⁵ *Victoria Co Ltd v Deputy Commissioner of Taxation* (2001) 47 ATR 263; [2001] FCA 641.

⁸⁶ Australian Taxation Office, *Income Tax: Foreign Exchange Gains and Losses of a Capital Nature – Realisation of Gains and Losses and the Meaning of "Eligible Contract" in Division 3B*, TR 93/8, 25 March 1993 (withdrawn on 3 July 1996).

⁸⁷ *Federal Commissioner of Taxation v Messenger Press Pty Ltd* (2013) 212 FCR 298; 92 ATR 381; [2013] FCAFC 77.

⁸⁸ See Richard Krever, "TOFA: The Unfinished Agenda" (2006) 35(2) *AT Rev* 91 (mentioning, for example, finance leases and loans disguised as annuities, discounted notes with deferred interest payments and schemes promoting deductions for both interest and principal payments).

⁸⁹ See, eg, Australian Taxation Office, *Taxation of Financial Arrangements: A Consultative Document* (Australian Government, 1993); Australian Taxation Office, *Taxation of Financial Arrangements: An Issues Paper* (Australian Government, 1996). The reports covered various financial arrangements and suggested bringing to tax forex gains and losses on a retranslation basis as used under accounting standards. See the comparison between accounting treatment and tax treatment of forex gains and losses in Robin Speed, "Foreign Currency and the Proposed Accruals Tax System" (1994) 23(3) *AT Rev* 125; Dean Hanlon and Les Nethercott, "Foreign Currency Translation: The Beginning of a New Era" (2005) 1(1) *Journal of Australasian Tax Teachers Association* 95.

⁹⁰ *Coles Myer Finance Ltd v Commissioner of Taxation* (1993) 176 CLR 640; 25 ATR 95.

⁹¹ *Coles Myer Finance Ltd v Commissioner of Taxation* (1993) 176 CLR 640, 665; 25 ATR 95.

⁹² Review of Business Taxation (John Ralph, chair), *A Tax System Redesigned: More Certain, Equitable and Durable* (Final Report, 1999) (*Ralph Report*).

recommended valuing financial assets and liabilities at the end of each year on a mark-to-market basis.⁹³ This was expected to give rise to recognising unrealised forex gains and losses on an accrual basis, which would raise potential cashflow difficulties.⁹⁴

Extensive consultations were carried out as part of the Ralph Review, and the government's response to the Review's recommendations took a different form and resulted in the repeal of Div 3B.⁹⁵ The government stated that it was intended to remove anomalies and provide certainty and consistency for bringing to account forex gains and losses in a manner consistent with Australia's broad policy intention of tax laws.⁹⁶ Instead, consolidation of foreign currency rules in common law and the statute occurred, effective 1 July 2003.⁹⁷

The forex regime, still in effect, comprises three parts: core translation rules in Div 960-C of the *ITAA 1997*, functional currency rules in Div of 960-D of the *ITAA 1997*, and foreign exchange gains and losses rules in Div 775 of the *ITAA 1997*. If digital currency were to be characterised as foreign currency, any or all of the three parts might apply without the need to characterise transactions as capital or revenue transactions.

The core translation rules provide the tax recognition time at which an amount in foreign currency shall be converted into Australian dollars. For example, ordinary income derived or received in foreign currency shall be translated into Australian currency when income is derived or when cash is received, whichever occurs first; deductions for non-depreciating assets are translated at the time when expenses are tax-deductible (ie, generally when expenses are incurred) or when cash is paid, whichever occurs first; capital gains and losses in respect of CGT assets are translated when a CGT event happens (eg, disposal or loss).⁹⁸

Assume trading stock is acquired by a business using digital currency. To apply the core translation rules to digital currency, the costs in digital currency must be translated into Australian currency generally when they are incurred. The conversion will be direct from the unit of digital currency to Australian dollars or indirect through US dollars that commonly represent the value of digital currencies in the marketplace. If, however, digital currency is not treated like foreign currency, two separate taxable events are likely to arise. The first is to recognise the value of trading stock in Australian currency. The second is to recognise any gain or loss that resulted from holding digital currency. The proceeds from the disposal of digital currency in the second event are likely to be taken to represent the value of trading stock in the first event. Given that capital gains or losses associated with fiat currencies are similarly recognisable under the CGT regime, the inquiry into whether to treat digital currency like foreign currency is not meaningful for the core translation rule.

Second, the functional currency rules, generally available to reporting entities of financial statements, allow eligible taxpaying entities⁹⁹ to use at their option the *sole or dominant* foreign currency in which their accounts are kept to record tax accounts.¹⁰⁰ Briefly, all amounts, including amounts in Australian dollars, are recorded in the chosen functional currency. This is then translated into Australian dollars at tax time to present the total income tax liability in Australian currency.¹⁰¹ In the context of digital

⁹³ *Ralph Report*, n 92 (see, particularly, Recommendation 9.1(a)).

⁹⁴ *Ralph Report*, n 92 (see, particularly, Recommendation 9.1(a)). See Hanlon and Nethercott, n 89; Rodney Fisher, "Taxation of Financial Arrangements: Australian Recommendations and Overseas Reality" (2000) 29(3) AT Rev 168.

⁹⁵ By *New Business Tax System (Taxation of Financial Arrangements) Act (No 1) 2003* (Cth).

⁹⁶ Explanatory Memorandum, *New Business Tax System (Taxation of Financial Arrangements) Bill (No 1) 2003* (Cth) [4.1].

⁹⁷ See *Income Tax Assessment Act 1997* (Cth) ss 775-155, 960-55.

⁹⁸ *New Business Tax System (Taxation of Financial Arrangements) Act (No 1) 2003* (Cth) s 960-50. *Income Tax Assessment Regulation 1997* (Cth) Schs 1 and 2 further provide when to use average rates, daily rates or rates that are consistent with the rates used in preparing audited financial reports.

⁹⁹ An eligible taxpaying entity may be permanent establishment, an offshore banking unit, a controlled foreign company or a transferor trust: in *Income Tax Assessment Act 1997* (Cth) s 960-60(1).

¹⁰⁰ *Income Tax Assessment Act 1997* (Cth) s 960-70.

¹⁰¹ *Income Tax Assessment Act 1997* (Cth) s 960-80.

currency, the functional currency rules have no application because no financial reporting standards have been issued to allow reporting entities to present their accounts in a unit of digital currency.

The last set of rules includes operative provisions to include forex gains in assessable income and allow forex losses to be deducted from assessable income for nine FREs. These events recognise notional foreign currency fluctuations irrespective of whether foreign currency amounts are converted into or from Australian dollars.¹⁰² They are designed to bring forex gains and losses to account by separating foreign currency transactions from the underlying transaction.

A notable exception to the forex gains and losses rules is a foreign currency that becomes due for payment within 12 months of the tax recognition time of income or an expense. In such a situation, a forex gain or loss is integrated with the assessable income or allowable deduction.¹⁰³ Thus, the Australian forex gains and losses rules use a partial integration method: forex gains and losses are recognised with the underlying transaction sometimes or without the underlying transaction at other times.¹⁰⁴ However, the policy basis for adopting the partial integration approach is difficult to explain.¹⁰⁵ Other exclusions in line with the broad Australian tax policy include forex gains and losses of a private or domestic nature, which are disregarded unless they relate to taxable capital gains and losses under the CGT regime,¹⁰⁶ and forex gains and losses that are exempt or non-assessable non-exempt income or made in gaining or producing exempt or non-assessable non-exempt income, which are also disregarded.¹⁰⁷

The first five FREs recognise forex gains and losses when the foreign currency is disposed of when a person ceases to have a right to receive foreign currency, a person ceases to have an obligation to receive foreign currency, a person ceases to have an obligation to pay foreign currency, and when a person ceases to have a right to pay foreign currency.¹⁰⁸ In the absence of these rules, forex gains and losses may only be recognised if they are of a revenue nature or when the foreign currency is disposed of under CGT event A1.

The next two FREs 6 and 7 apply in relation to special rollover relief. Under this measure, taxpayers can elect to defer the recognition of forex gains and losses associated with the discharge of an obligation to pay foreign currency by way of eligible securities (bills of exchange and promissory notes) being issued under a facility agreement.¹⁰⁹ Instead, deferred forex gains and losses are recognised when an obligation arises to pay in foreign currency the principal amount of the rolled-over loan.¹¹⁰ When the terms, conditions or effect of such a facility arrangement are materially varied, or the types of securities issued under such a facility agreement are materially varied, such a variation also gives rise to a FRE.¹¹¹

¹⁰² Explanatory Memorandum, *New Business Tax System (Taxation of Financial Arrangements) Bill (No 1) 2003* (Cth) [4.2]. Effectively, Div 775 prevailed the operation of former Div 3B of the *Income Tax Assessment Act 1936* (Cth) under which notional foreign currency rate fluctuations were not recognisable in *Federal Commissioner of Taxation v Energy Resources of Australia Ltd* (1996) 185 CLR 66; 33 ATR 52. See applications of the FREs under Div 775 in GA Barton, "The Recognition of Foreign Currency Gains and Losses in Australian Income Tax Law" (2008) 34(1) *University of Western Australia Law Review* 1; Stephen Barkoczy, "Australia's New Forex Regime" (2004) 7(1) *Journal of Australian Taxation* 6.

¹⁰³ *Income Tax Assessment Act 1997* (Cth) ss 775-70 (short-term forex realisation gains), 775-75 (short-term forex realisation losses).

¹⁰⁴ Forex gains and losses can be recognised by treating foreign currency transactions separate from the underlying transactions (as financial arrangements) or integrating foreign currency transactions, where anything that falls in between can be referred to as a partial integration approach. See Matthew T Adams and Robert JE Henrey, "Tax Consequences of Foreign Currency Fluctuation" (1978) 30(4) *Tax Executive* 301.

¹⁰⁵ Krever, n 88, 107-108; Graeme S Cooper, "Trying to Make Sense of the Financial Arrangements Regime" (2007) 36(3) *AT Rev* 160, 170 (also noting ambiguity arising from the interaction between the taxation of financial arrangements and forex gains and losses rules).

¹⁰⁶ *Income Tax Assessment Act 1997* (Cth) ss 775-15(2), 775-30(2).

¹⁰⁷ *Income Tax Assessment Act 1997* (Cth) ss 775-20, 775-25, 775-27, 775-35.

¹⁰⁸ *Income Tax Assessment Act 1997* (Cth) ss 775-40 (FRE 1), 775-45 (FRE 2), 775-50 (FRE 3), 775-55 (FRE 4), 775-60 (FRE 5).

¹⁰⁹ *Income Tax Assessment Act 1997* (Cth) Subdiv 775-C.

¹¹⁰ *Income Tax Assessment Act 1997* (Cth) s 775-215 (FRE 6).

¹¹¹ *Income Tax Assessment Act 1997* (Cth) s 775-220 (FRE 7).

While digital currency has not been considered in the context of the rollover relief, it is noted that digital currency that is subject to the CGT provisions would not be eligible for a replacement-asset rollover unless the digital currency is security disposed of under a securities lending arrangement.¹¹²

The remaining two FREs 8 and 9 are housed in the provisions for compliance cost measures. There are three elections available in relation to foreign currency-denominated accounts. First, the limited balance test allows taxpayers to disregard forex gains and losses associated with the cessation of a right to receive or an obligation to pay foreign currency.¹¹³ This option is available if the total of all accounts covered in a taxpayer's election is no more than AU\$250,000, but the test is still met if the balance is no more than AU\$500,000 for up to two 15-day periods in any income year.¹¹⁴ It does not require a separate realisation event. Second, taxpayers may annually restate their account balance by reference to deposits and withdraws.¹¹⁵ This involves disregarding realised forex gains and losses upon ceasing to have a right to receive or an obligation to pay foreign currency during a relevant transaction period, where the disregarded forex gains and losses are recognised under one FRE for that period.¹¹⁶ The other FRE applies when a taxpayer makes an election to treat financial arrangements in line with their accounting treatment of profits and losses.¹¹⁷ This FRE prevails over all other FREs to recognise foreign currency rate fluctuations in a manner consistent with the accounting standards.

The UK government implemented practical CGT measures to recognise the costs of cryptocurrency based on three cost-basis methods instead of an asset-by-asset basis.¹¹⁸ First, gains and losses from the tokens sold on the same day as they are bought are recognised based on the cost base of the tokens sold on that day. Second, gains and losses from tokens sold within 30 days of acquisition are recognised based on the cost base of the tokens purchased within those 30 days. If the first and second methods do not apply, tokens are placed in a pool. When tokens in a pool are disposed of, an average cost of the pool is used to work out any capital gain or loss. The average pool cost is calculated every time a token exits the pool.

On the contrary, Australia has not yet adopted a special accounting measure for digital currency. Under the CGT provisions, an individual unit of digital currency (a coin) is regarded as a CGT asset subject to a realisation event. The Commissioner accepts that the Bitcoin wallet is probably an aggregation of the items of property, and the bundle of rights in Bitcoin in the wallet does not amount to a chose in action.¹¹⁹

The CGT regime recognises that two or more assets can become a single asset (eg, two adjacent blocks of the land becoming one to be sold or transferred as a single asset).¹²⁰ Conversely, the division of collectables ordinarily taken as a set is statutorily prevented to avoid access to the CGT exemption available to an item of collectables costing less than \$500.¹²¹ However, the Commissioner has not applied this rule to digital currency.

¹¹² *Income Tax Assessment Act 1997* (Cth) s 112-115 (providing replacement-asset rollovers under the CGT regime).

¹¹³ *Income Tax Assessment Act 1997* (Cth) Subdiv 775-D.

¹¹⁴ *Income Tax Assessment Act 1997* (Cth) s 775-245.

¹¹⁵ *Income Tax Assessment Act 1997* (Cth) Subdiv 775-E.

¹¹⁶ *Income Tax Assessment Act 1997* (Cth) s 775-285 (providing FRE 8).

¹¹⁷ *Income Tax Assessment Act 1997* (Cth) Subdiv 775-F (including FRE 9 in s 775-305). The election is provided for financial arrangements that are qualifying forex accounts under *Income Tax Assessment Act 1997* (Cth) s 230-255. See the meaning of a financial arrangement and taxpayer eligibilities in *Income Tax Assessment Act 1997* (Cth) s 230-265.

¹¹⁸ HM Revenue & Customs, *Guidance: Check If You Need to Pay Tax When You Sell Cryptoassets* (19 December 2018) <<https://www.gov.uk/guidance/check-if-you-need-to-pay-tax-when-you-sell-cryptoassets#pool>>.

¹¹⁹ Australian Taxation Office, *Income Tax: Is Bitcoin a "CGT Asset" for the Purposes of Subsection 108-5(1) of the Income Tax Assessment Act 1997?*, TD 2014/26, 17 December 2017, [9] and [14].

¹²⁰ *Income Tax Assessment Act 1997* (Cth) s 112-25.

¹²¹ *Income Tax Assessment Act 1997* (Cth) s 118-10(1).

C. Seribu: Bitcoin Is Not a Foreign Currency

The inception of Bitcoin gave rise to the question of what is or is not a foreign currency. Six years after the Commissioner released his ruling that Bitcoin was not a foreign currency,¹²² Seribu Pty Ltd (the taxpayer) challenged the Commissioner in the Administrative Appeals Tribunal to contend that Bitcoin was a foreign currency. The taxpayer used 0.5 Bitcoin to settle a payment in 2018 and made a forex loss of AU\$856.24 in respect of the 0.5 Bitcoin acquired earlier that year. If Bitcoin were characterised as a foreign currency, the forex regime would allow the taxpayer to deduct the loss in the year in which the Bitcoin was used. If, however, the CGT regime applied, the loss would be offsettable against a capital gain made by the taxpayer in the same income year or a future income year. In the absence of offsettable capital gains, the loss would be deferred with no immediate effect to reduce the taxable income of the taxpayer in the year in which the Bitcoin was used.¹²³

The tribunal ruled in favour of the Commissioner. Consistent with the view in the Commissioner's ruling, the tribunal stated that Australian currency is the unit of exchange established and controlled by the Commonwealth of Australia under the *Currency Act* and Pt V of the *Reserve Bank Act 1959* (Cth).¹²⁴ Bitcoin, neither issued nor recognised by any sovereign State at that time, was not the comparator of Australian currency to meet the statutory meaning of foreign currency.¹²⁵ Digital currency as defined in the *GST Act* was not given regard.¹²⁶ Foreign cases about money laundering, being *United States v Faiella*¹²⁷ and *Skatteverket v David Hedqvist*¹²⁸ which concerned value-added tax, also weighted little in the tribunal's decision.¹²⁹

However, the tribunal's decision was queried when Bitcoin became legal tender in El Salvador, effective 7 September 2021. Cuba also recognised and regulated cryptocurrencies for payment in the same year.¹³⁰ Another consideration was government-issued digital currencies. In 2020, the People's Republic of China began to roll out the Digital Currency Electronic Payment (DC/EP), also known as e-CNY or the digital yuan. Operating similarly to electronic fund transfers of legal currency between bank accounts, the DC/EP is a digitalised version of the Chinese legal currency RMB (renminbi) and targeted for handling small-scale frequent retail transactions. In light of the new developments subsequent to the decision in *Seribu*, the meaning of digital currency came to light again concerning foreign currency.

V. PROPOSED AMENDMENT TO THE DEFINITION OF DIGITAL CURRENCY

The Exposure Draft released in June 2022 stated that the amended definition of digital currency for the *GST Act* would be as follows:¹³¹

digital currency means digital units of value that:

- (a) are designed to be fungible; and
- (b) can be provided as consideration for a supply; and

¹²² Australian Taxation Office, *Income Tax: Is Bitcoin a "Foreign Currency" for the Purposes of Division 775 of the Income Tax Assessment Act 1997?*, TD 2014/25, 17 December 2014.

¹²³ *Income Tax Assessment Act 1997* (Cth) s 102-5(1).

¹²⁴ *Seribu Pty Ltd v Federal Commissioner of Taxation* (2020) 111 ATR 882, 888 [29]; [2020] AATA 1840. See case notes and comments in Anthony Bradica, Adam Dimac and Bradley White "Are Bitcoin and Other Cryptocurrency Treated as 'Money' or 'Currency' in Australia?" (2021) 37(1) *Banking and Finance Law Review* 177.

¹²⁵ *Seribu Pty Ltd v Federal Commissioner of Taxation* (2020) 111 ATR 882, 884 [7]; [2020] AATA 1840.

¹²⁶ *Seribu Pty Ltd v Federal Commissioner of Taxation* (2020) 111 ATR 882, 888 [31]; [2020] AATA 1840.

¹²⁷ *United States v Faiella*, 39 F Supp 3d 544, (SDNY, 2014).

¹²⁸ *Skatteverket v Hedqvist* (European Court of Justice, C-264/14, ECLI:EU:C:2015:718, 22 October 2015).

¹²⁹ *Seribu Pty Ltd v Federal Commissioner of Taxation* (2020) 111 ATR 882, 888 [31]; [2020] AATA 1840.

¹³⁰ MacKenzie Sigalos, "Cuba's Central Bank Now Recognizes Cryptocurrencies such as Bitcoin", *CNBC*, 27 August 2021 <<https://www.cnbc.com/2021/08/27/cubas-central-bank-now-recognizes-cryptocurrencies-like-bitcoin.html>>.

¹³¹ Exposure Draft, *Treasury Laws Amendment (Measures for Consultation) Bill 2022* (Cth) ss 1–2 (amending the definition of "digital currency" in *A New Tax System (Goods and Services Tax) Act 1999* (Cth) s 195-1).

- (c) are generally available to members of the public without any substantial restrictions on their use as consideration; and
- (d) either:
 - (i) are not denominated in any country's currency; or
 - (ii) are denominated in a currency that is not issued by, or under the authority of, an *Australian government agency or a foreign government agency (within the meaning of the *Income Tax Assessment Act 1997*); and
- (e) do not have a value that depends on, or is derived from, the value of anything else; and
- (f) do not give an entitlement to receive, or to direct the supply of, a particular thing or things, unless the entitlement is incidental to:
 - (i) holding the digital units of value; or
 - (ii) using the digital units of value as consideration;

but does not include a thing that, if supplied, would be a *financial supply for a reason other than being a supply of one or more digital units of value to which paragraphs (a) to (f) apply.

Currently, the GST definition of digital currency excludes money. This exclusion is expected to be removed from the meaning of digital currency. Instead, money will be redefined to exclude digital currency in the *GST Act*.¹³² Therefore, the separation of digital currency and money remains after the proposed amendments.

The Exposure Draft further provides that digital currency will have the same meaning as in the *GST Act* for income tax law purposes.¹³³ The definition of foreign currency will be amended to exclude digital currency.¹³⁴ The following paragraphs illustrate conceptual and practical difficulties in applying the forex regime to digital currencies in light of the conception of money, particularly non-government-issued digital currencies.

A. Digital Currency Is Not Money

Although not all kinds of money are subject to the forex regime (eg, gold), the money-like nature of digital currency has been the reason for supporting the position that digital currency should be treated equivalently to foreign currency for the purposes of the forex regime. Digital currencies can be used as a means of exchange for goods and services.¹³⁵ They are more divisible and more portable than gold,¹³⁶ a kind of money that is not subject to the forex regime and, with a mobile device, easier, and more convenient to carry than banknotes and coins. The official currency of the Micronesian Island, called Rai, is made of giant discs of rocks measuring up to four metres in diameter. Many of these discs are too heavy to move, but they will constitute foreign currency by virtue of its legal definition for the Australian income tax law. However, transactions per second of digital currencies are lower than 1,500–2,000 VISA transactions per second.¹³⁷ The limited transactions per second might hinder digital currencies from being an effective payment system.

Jevons considers that money is a means of exchange, a store of value, and a unit of measure.¹³⁸ Money generally exhibits most or all of these characteristics: standardisation for ascertaining value, wide

¹³² Exposure Draft, *Treasury Laws Amendment (Measures for Consultation) Bill 2022* (Cth) s 3.

¹³³ Exposure Draft, *Treasury Laws Amendment (Measures for Consultation) Bill 2022* (Cth) s 11.

¹³⁴ Exposure Draft, *Treasury Laws Amendment (Measures for Consultation) Bill 2022* (Cth) s 12.

¹³⁵ Digital currency systems can provide fast and secure transactions at low transaction costs. They have no national boundaries, whereas international transfers of fiat money are slower than domestic transfers of fiat money. See Schmidt et al, n 42, 6.

¹³⁶ Graseck L Betsy et al, *Competing for Growth* (Morgan Stanley, Wealth & Asset Management Blue Paper, 2021) 28 (stating “Bitcoin is divisible up to 8 decimal places, while gold can be divided only by smelting” and “Bitcoin private keys can be moved digitally or physically, [while] gold is difficult and costly to transport”).

¹³⁷ See Binance Academy, *Transactions Per Second (TPS)* <<https://academy.binance.com/en/glossary/transactions-per-second-tps>>. The transaction speed in a decentralised system is due to the consensus mechanism. Ethereum, the second largest blockchain network has undergone an upgrade, known as the Merge, from proof-of-work to proof-of-state to enable more transactions per second. However, it is not yet as efficient as the traditional forms of electronic transactions.

¹³⁸ W Stanley Jevons, *The Mechanism of Exchange* (D. Appleton and Company, 1877) 16.

acceptance, divisibility, ease of carriage, and no or little deterioration.¹³⁹ Fiat currency is only money if a government endorses it. It has no value but becomes money as the government promises its value.

The OECD has published the following views:

- There is little evidence that virtual currencies are used as independent units of account as they mostly represent an equivalent value in fiat currency.
- The limited, although growing, acceptance of virtual currencies restricts significantly their use as means of exchange – a limited number of merchants accept them.
- The ability of virtual currencies to serve as a reliable store of value is significantly limited by their high volatility of their purchasing power.¹⁴⁰

For the reasons above, the Reserve Bank of Australia also states that digital currencies “do not display the key characteristics of money” and “currently their use as a means of payment is limited” in Australia.¹⁴¹ Many authors have endorsed this view.¹⁴²

Digital currencies are more valuable when more people demand them.¹⁴³ However, many factors influence the demand for digital currencies, such as government regulations, the operations of exchange or trading platforms, and major traders’ movements. Digital currencies suffer significant price fluctuations because their values are generally upon speculation rather than underlying assets. Such factors led Bitcoin to drop in price to around US\$18,000 per coin, only a year after recording the peak price of over \$69,000 per coin in November 2021.¹⁴⁴

Stablecoins are generally pegged to an asset or a basket of assets to maintain a stable value of the coins. Tether, which has the largest market capitalisation, claims that it issues each stablecoin in USDT with one US dollar in its reserves. However, shifts in demand also resulted in USDT experiencing price volatility, recording the lowest at US\$0.572521 per coin on 2 March 2015 and the highest at US\$1.32 per coin in July 2018.¹⁴⁵ Stablecoins carry risks that their value may depend on the responsible enterprise properly collateralising the coins issued or relying on pre-determined algorithms controlling supply and demand without collateralisation.

Whereas Trivedi and Golani argue that fiat-backed stablecoins are relatively stable and, therefore, should be treated like fiat currencies for tax purposes,¹⁴⁶ stablecoins are not backed up by sovereign nations. Conversely, fiat currencies are backed by sovereign nations, often without collateralised assets, with their value fluctuating due to market fluctuations in the currency exchange rates or formal action by the

¹³⁹ Frederic S Mishkin, *The Economics of Money, Banking and Financial Markets* (Pearson and Rennin University Press, 9th ed, 2013) 50-51.

¹⁴⁰ Directly quoted from Table 1.1 in *Taxing Virtual Currencies*, n 9, 20.

¹⁴¹ Reserve Bank of Australia, *Digital Currencies* <<https://www.rba.gov.au/education/resources/explainers/cryptocurrencies.html>>.

¹⁴² See, eg, J Cassidy et al, “A Toss of a (Bit)Coin: The Uncertain Nature of the Legal Status of Cryptocurrencies” (2020) 17(2) *eJournal of Tax Research* 168; Schmidt et al, n 42, 11; Frederic S Mishkin, *The Economics of Money, Banking and Financial Markets* (Pearson Education Limited, 13th ed, 2022) 103–103 (particularly focusing on the failure of cryptocurrencies serving as a store of value). Conversely, the Commissioner appears to view in TD 2014/25 that Bitcoin serves as a medium of exchange, a unit of account and a store of value: in Nathan De Zilva, “The Evolving Tax Treatment of Cryptocurrencies” (2018) 52(7) *Taxation in Australia* 372.

¹⁴³ Similar examples can be found in eBay and YouTube where they are popular platforms for exchanges due to a large number of users or subscribers. Another value driver is scarcity. Although scarcity does not drive value in itself, scarce resources are more valuable than abundant resources. See also Betsy et al, n 136, 28 (stating “Bitcoin’s current supply of 18M (max. of 21M), vs. god’s current supply of 200K tonnes (50K tons left to be mined”).

¹⁴⁴ Alex Gailey and Marcos Cabello, *Bitcoin’s Price Holds Steady at \$17,000. How Investors Should React* (16 December 2022) NextAdvisor <<https://time.com/nextadvisor/investing/cryptocurrency/bitcoin-crash-continues/>>.

¹⁴⁵ Coindesk, *About Tether* <<https://coinmarketcap.com/currencies/tether/>>. Potential income tax implications are questioned in discussing stablecoins and their variants in Noopur Trivedi and Jitesh Golani, “Taxation of Stablecoins: Navigating the Income Tax Considerations” (2021) 50(4) *AT Rev* 242.

¹⁴⁶ See Trivedi and Golani, n 145 (distinguishing fiat-backed stablecoins from crypto-collateralised stablecoins and algorithm-based stablecoins).

issuing government (eg, official devaluation or upward revaluation).¹⁴⁷ In the absence of governmental support, stablecoins may be more akin to commodities than currencies, like shares in a company that has sufficient assets to recoup the capital should the company fail. While Trivedi and Golani suggest applying the same tax treatment to fiat-backed stablecoins as that applied to fiat currencies,¹⁴⁸ such an approach would result in unnecessary complexity in terms of tax administration and interpretation.

The International Monetary Fund (IMF) states that “the legal concept of money is also based on the state’s power to regulate the monetary system”.¹⁴⁹ In 1908 in Australia, a military coup heavily involved in the trade of rum, also used as a form of currency, overthrew the government and placed the colony under military rule. The event known as the Rum Rebellion was referred to in *Seribu* as one demonstrating “the importance of a stable money supply under the supervision of government”.¹⁵⁰ The tribunal added: “That lesson has been repeated in countries around the world where currency collapse has been a feature (and often precipitating cause) of political upheaval and social unrest. Control over monetary policy – including a measure of control over the currency and the money supply – is an important tool for governments to use in their management of the economy.”¹⁵¹ The IMF warned of significant risks to consumer protection, financial integrity, and financial stability associated with El Salvador adopting Bitcoin as its legal tender.¹⁵²

B. Exclusion of Government-issued Digital Currencies

The proposed definition of digital currency, which is expected to be adopted for the Australian income tax law, excludes government-issued digital currencies.¹⁵³ Government-issued digital currency can be explained with the terminology “central bank digital currency” (CBDC). Although the concept of providing greater access to digital forms of central bank money is not new,¹⁵⁴ CBDC is not well defined. Instead of asking what CBDC is, CBDC may be better understood by illustrating what CBDC is not: “a digital form of central bank money that is different from balances in traditional reserve or settlement accounts [such as bank deposits].”¹⁵⁵ The Committee on Payments and Market Infrastructures identified three key properties of cryptocurrency: electronic, non-liability of anyone, and peer-to-peer exchange.¹⁵⁶

¹⁴⁷ Cohen argues that the tax policy for recognising fiat currency fluctuations should be consistent regardless of whether the fluctuations arose from currency market fluctuations or government action: in Sheldon S Cohen, “Tax Consequences of Foreign Currency Fluctuations” (1972) 6(1) *Vanderbilt Journal of Transnational Law* 13. The author argues that stablecoins may not be treated as fiat currencies not because stablecoins are pegged to another currency or assets, which may be the case for certain fiat currencies and was particularly common for the colonies of the British Empire, but because their similarities with commodities.

¹⁴⁸ Trivedi and Golani, n 145, 246.

¹⁴⁹ Dong He et al, “Virtual Currencies and Beyond: Initial Considerations” (IMF Staff Discussion Note SDN/16/03, January 2016) 16.

¹⁵⁰ *Seribu Pty Ltd v Federal Commissioner of Taxation* (2020) 111 ATR 882, 884 [6]; [2020] AATA 1840.

¹⁵¹ *Seribu Pty Ltd v Federal Commissioner of Taxation* (2020) 111 ATR 882, 884 [6]; [2020] AATA 1840. See further Schmidt et al, n 42, 5 (“Fiat money has a money supply based on decisions by humans. Cryptocurrency supply is based on an algorithm. For example, one can know how many bitcoins will be in circulation, e.g., in a month, a year or in a decade from now. Fiat money can be multiplied at will, has no upper limit and consequently may one day be worthless. Certain cryptocurrencies have a limited supply. For example, there will ever only be 21 million bitcoins, of which 18.5 million have been created as of August 2020.”).

¹⁵² International Monetary Fund, *Mission Concluding Statement – El Salvador: Staff Concluding Statement of the 2021 Article IV Mission* (22 November 2021) <<https://www.imf.org/en/News/Articles/2021/11/22/mcs-el-salvador-staff-concluding-statement-of-the-2021-article-iv-mission>>.

¹⁵³ Exposure Draft, *Treasury Laws Amendment (Measures for Consultation) Bill 2022* (Cth) s 1.

¹⁵⁴ See, eg, James Tobin, “The Case for Preserving Regulatory Distinctions” (1987) 30(5) *Challenge* 10 (suggesting “a medium with the convenience of deposits and the safety of currency”). Important policy considerations involved in electronic money and electronic payment systems for retail transactions have been discussed in length in United States Department of the Treasury, “An Introduction to Electronic Money Issues” (Paper presented at the Toward Electronic Money and Banking: The Role of Government, 19–20 September 1996).

¹⁵⁵ Committee on Payments and Market Infrastructures, *Central Bank Digital Currencies* (Bank for International Settlements, March 2018) 4 (*Central Bank Digital Currencies*).

¹⁵⁶ Committee on Payments and Market Infrastructures, *Digital Currencies* (Bank for International Settlements, November 2015).

Accordingly, CBDC may be defined as “electronic central bank liabilities that can be used in peer-to-peer exchanges”.¹⁵⁷ Where cash is one form of central bank money, CBDC is unlikely to be as widely accepted as cash.

To illustrate CBDC, Bech and Garratt define the key properties of money in terms of issuer, form, accessibility, and technology.¹⁵⁸ Different types of money are categorised in Figure 1 according to those key properties.

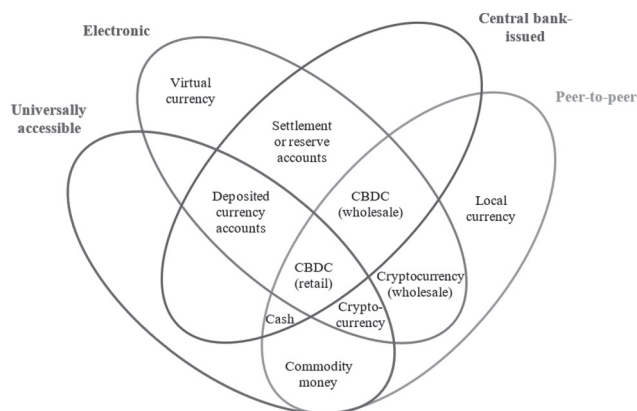


FIGURE 1. The money flow: a taxonomy of money.

Wide accessibility is primarily intended to distinguish the low-value “retail” segment (eg, cheques, credit transfers, direct debits, and card payments) and the large-value high-priority “wholesale” segment (eg, interbank transfers).¹⁵⁹ The main examples of non-widely accessible money are interbank reserve and settlement accounts, which are outside the scope of consideration for defining digital currency; digital currency must be generally available to members of the public.¹⁶⁰ Examples of wholesale CBDC and wholesale cryptocurrency are CADcoin, experimented with by the Bank of Canada in co-operation with a Canadian fintech firm, and Utility Settlement Coin, developed by the private sector to digitalise fiat currencies.¹⁶¹ Both examples are not actively pursued in practice. Conversely, the account-based virtual currency, PokéCoin used for in-game purchases may be considered widely accessible and, therefore, a digital currency under the statutory definition.

While the definition of a digital currency refers to *prima facie* the digital form of money, further consideration can be given to what constitutes a peer-to-peer network. The OECD states that CBDC is issued by a central public authority and maintains the same value as physical currency in the same denomination, not limited to government-issued currencies on the blockchain.¹⁶² The DC/EP digitalising the Chinese yuan is an example of an account-based central bank digital currency (or deposited currency accounts). Blockchain-based digital currencies can take various forms. For example, the verification system can be limited to authorised parties (eg, banks), referred to as a private (or permissioned) blockchain system, or open to the public, in which the blockchain is called public (or permissionless).

¹⁵⁷ *Central Bank Digital Currencies*, n 155, 57.

¹⁵⁸ Morten Bech and Rodney Garratt, “Central Bank Cryptocurrencies”, *BIS Quarterly Review*, 17 September 2017, graph 3 <https://www.bis.org/publ/qtrpdf/r_qt1709f.htm> (*Central Bank Cryptocurrencies*). In this review, the terminology “central bank cryptocurrency” (CBCC) is used instead of CBDC.

¹⁵⁹ *Central Bank Cryptocurrencies*, n 158, 4 fn 7.

¹⁶⁰ See *A New Tax System (Goods and Services Tax) Act 1999* (Cth) s 195-1 (particularly, (c) in the definition of digital currency).

¹⁶¹ *Central Bank Digital Currencies*, n 155, 61.

¹⁶² *Taxing Virtual Currencies*, n 9, 47. Although the OECD states that DLT based on tokens is conceivably superior to centralised technology based on accounts in terms of programmability and security of digital currencies, the Bank of England argues that “there is no inherent reason why a CBDC should be based on DLT” (48).

Private and public blockchains can be adopted for a currency in a consortium (consortium blockchain). Government-issued digital currency would use a private blockchain or a group of private blockchains for regulation, control, and management.

Upon the illustration above, the current definition of digital currency can be represented by the areas of deposited currency accounts, retail CBDC, cryptocurrency, and virtual currency in Figure 1. It may also include wholesale cryptocurrency, depending on the degree of public accessibility in practice. The proposal to amend the definition of “digital currency” would cause deposited currency accounts and retail CBDC (which are both government-issued digital currencies) to stop being classified as digital currency. However, Bitcoin continues to be defined as a digital currency because it is not a government-issued digital currency, though recognised as a legal tender in El Salvador.

Deposited currency accounts, distinguishable from wholesale and retail CBDCs, refer to deposits held by the public instead of banks.¹⁶³ This form of money is rare in practice but is expected to increase. One example is the DC/EP, which is not on blockchain but uses centralised technology. Ecuador and Sweden similarly provide electronic payment systems for their respective central bank digital currency, Dinero electrónico and eKrona.

Although retail CBDC are widely discussed, the success of retail CBDC is yet to be known. Previously, the Bolivarian Republic of Venezuela introduced a blockchain-based digital currency named Petro during economic turmoil in an attempt to circumvent US sanctions and access financing. However, the validity of Petro remains to be determined.¹⁶⁴ In the United States, the Federal Reserve Bank is preparing to launch a peer-to-peer digital currency, “FedCoin”, expected to be released in the middle of 2023.¹⁶⁵

The success of government-issued digital currencies largely depends on their value stability. Some authors argue that a CBDC should be based on interest-bearing accounts to achieve the goal of a practically costless medium of exchange, a secure store of value, and a stable unit of account.¹⁶⁶ CBDC forms part of a nation’s fiscal and economic management, and the monetary policy must foster the true price stability of CBDC.

The government’s proposal to amend the income tax law is justifiable. The new income tax definition of digital currency, along with the exclusion of digital currency in the meaning of foreign currency, together mean that the forex regime will apply to government-issued currencies, whether digital or non-digital. Government-issued digital currencies are supposedly stable in value. The FREs are designed to recognise value fluctuations that inevitably arise because the tax recognition time is not when cash is paid or received. A form of money that (potentially) fluctuates in value largely is more likely to be a commodity outside the forex regime’s scope.

VI. CONCLUSIONS

The taxation of crypto-assets is a challenging area due to the unique or novel characteristics of crypto-assets. Many nomenclatures, coupled with their inconsistent use, have challenged policymakers in Australia and abroad. The Australian government had defined “digital currency” in the GST law to address the rising trade and widespread use of crypto-assets. Further, in 2022, the government proposed to amend the definition and adopt the amended definition to be used for income tax purposes, although this has not yet been legislated.

The design principles of a consumption tax differ from those of an income tax. The GST definition of digital currency was intended to provide equivalent tax treatments to money. However, money can

¹⁶³ See Tobin, n 154 (mentioning deposited currency accounts).

¹⁶⁴ See Norton Rose Fulbright, *Venezuela Issues General Legal Framework on Cryptoassets and the “Petro” Cryptocurrency* (May 2018) <<https://www.nortonrosefulbright.com/en/knowledge/publications/fbd7fcbf/venezuela-issues-general-legal-framework-on-cryptoassets-and-the-petro-cryptocurrency>>.

¹⁶⁵ Supra, *Global CBDC Rollouts Continue: FedCoin and FedNow, Explained* (13 October 2022) <<https://supraoracles.com/academy/global-cbdc-rollouts-continue-fedcoin-and-fednow-explained>>.

¹⁶⁶ See, eg, Michael D Bordo, “Central Bank Digital Currency and the Future of Monetary Policy” (Working Paper 23711, National Bureau of Economic Research, August 2017).

be Australian currency, foreign currency, bills of exchange or even promissory notes. For income tax purposes, Australian currency is a unit of measure for calculating Australian tax liabilities. Foreign currency, which fluctuates in value as compared with Australian currency, is subject to the forex regime. Gains and losses from bills of exchange or promissory notes are recognised under the CGT regime unless other more appropriate provisions apply (eg, trading stock rules and the taxation of financial arrangements).

Without an income tax definition of digital currency, the Commissioner opines that Bitcoin was not a foreign currency. This position was confirmed in the case of *Seribu*.

The broad policy intent of the forex regime is to recognise economic gains and losses resulting from foreign currency rate fluctuations where the tax recognition time of income and deductions do not coincide with the time of cash receipts and payments. However, the regime partially treats foreign currency arrangements as financial arrangements in this manner. There are exceptions, such as short-term forex gains and losses integrated with the underlying transactions, which are difficult to explain on a tax policy basis.¹⁶⁷ The regime is complex as it was written in parallel with existing income and deduction rules. Characterising digital currencies as non-foreign currencies is simpler as it avoids the interpretative issues surrounding overlapping provisions and the application of complex forex gains and losses rules.

If the proposed definition of digital currency is adopted in the income tax law, unintended tax consequences are likely to be lessened. Although digital currency may be used as a means of exchange (as it exhibits characteristics such as fungibility and general availability to the public without any substantial restriction on use as payment), digital currency is still unlikely to be classified as money as it is not a reliable store of value due to high volatility of purchasing power.

The stability of value in fiat currency, defined as foreign currency in the income tax law, is managed and controlled by the government that issues the fiat currency. A sovereign nation's finance and economy partly depend on monetary policy such as money supply. Giving legal tender status to a non-government-issued digital currency poses significant risks to consumer protection, financial integrity, and financial stability. Given the high volatility of digital currency values, digital currencies used for payment may not be considered foreign currency for the forex regime from a policy perspective.¹⁶⁸ Although stablecoins are claimed to be less volatile, their price stability may be temporal. Stablecoins carry significant risks as private enterprises manage collateralised assets and algorithms that control supply and demand. In addition, they do not serve as independent units of account to be claimed as money. Selective inclusion of crypto-assets in the definition of digital currency is impractical and not recommended because it could create significant administrative problems and give rise to tax avoidance.

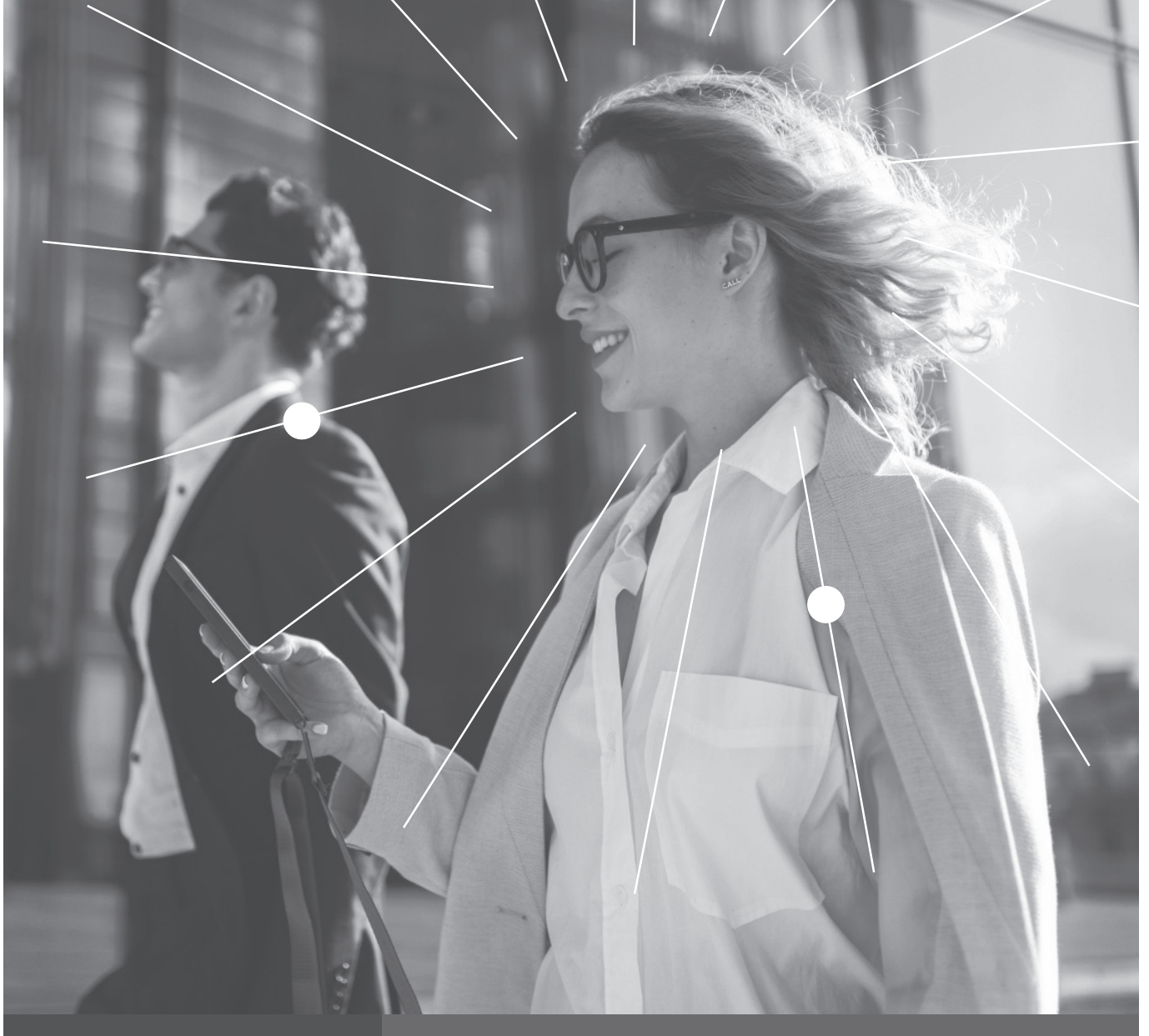
The new definition of "digital currency" in the income tax law will reflect the exclusion of government-issued digital currency from the concept of digital currency in the GST law. Although government-issued digital currencies are not common,¹⁶⁹ China's example of the DC/EP shows that they will have a fixed conversion rate for the sovereign fiat currency. Therefore, excluding government-issued digital currency from the new definition of "digital currency" is in line with the broad policy intent to recognise legal tender under the foreign exchange regime.

With continuing technological innovations and evolution, the actual operation of the defined term "digital currency" in the income tax law (assuming it is legislated) is yet to be seen, especially when digital currency is transacted between financial institutions on the blockchain or when government-issued digital currency is infrastructure on the blockchain.

¹⁶⁷ Krever, n 88; Cooper, n 105.

¹⁶⁸ Technically, the volatility of a currency's value should not prevent the currency from falling under the forex regime. There are numerous currencies around the world which have suffered mass inflation.

¹⁶⁹ This landscape is expected to change. See 27 examples of countries in different stages of CBDC projects in Herve Tourpe, Ashley Lannquist and Gabriel Soderberg, *A Guide to Central Bank Digital Currency Product Development: 5P Methodology and Research and Development* (International Monetary Fund, Fintech Note, September 2023).



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