### **Currency signs missing in Unicode**

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**Introduction.** By browsing different Wikipedia articles, I have found some currency signs missing from Unicode. Here I propose them, as well as propose further editorial changes.

**DOLLAR SIGN WITH TWO STROKES** (ESCUDO SIGN). It is well know that many currency signs are composed of a base letter with one or two strokes. Often the glyphs with one stroke are interchangeable with the ones with two strokes (with one being most common or officially recognized). This is the case for the yen, won, pound and dollar signs.

The two stroked version of the pound sign was dis-unified and encoded as the LIRA SIGN in the Latin-1 standard that was inherited to Unicode (£ 20A4) to represent the now discontinued Italian lira (code: ITL), as well as the Turkish lira, before they switched over to their own sign (20BA ₺). The rationale behind such dis-unification is sound, because that way it avoids confusability between the pound and the lira. The use of the code-point however, did not spread. This was because it was simpler to use the POUND SIGN (£ 00A3) character for both, and derive the currency from context. Today, fonts may render the pound sign with one or two strokes, but the lira sign should always be rendered with two strokes.

A very similar rationale follows for the two stroked dollar sign. While in many parts of the world, the two glyphs are interchangeable, Portugal used the two stroked glyph exclusively for their currency: the escudo (code: PTE), before it was replaced by the euro (like the Italian lira). The escudos were also used in many ex-colonies of Portugal, including Angola, Mozambique, Timor-Leste, Guiné-Bissau and São Tomé e Príncipe. Cape Verde continues to use an escudo currency today (code: CVE) with the same symbol.

The symbol is called "Cifrão" and is placed like a decimal separator, instead of at the end or beginning of the sequence; making it have a midNum word break property (e.g. 2\$50, would read two escudos and 50 cents).

The fact that it is the symbol of a living currency (as well as the one of an important historic currency), followed by its non-standard word break property, should make a very strong case for dis-unifying and encoding the escudo sign (even stronger than the lira if it wasn't for legacy practice).

Sources: (1)(2)

While the symbol could be called ESCUDO SIGN, there are some personal anecdotes, where the two stroked sign would be used for the American dollar, so that the one stroke sign can be used to distinguish it from a peso currency. While this has not been confirmed, it is quite plausible, and so the proposed name can accommodate such an informal use. If the committee rules that the name ESCUDO SIGN is better anyway, I won't object.

OLD SHEQEL SIGN. The state of Israel, decided to replace their Israeli pounds (Code: ILP/also called Israeli liras). The resulting currency is now called the "old shekel" (code: ILR), it was legal tender during the short period from the 24 of February 1980, to the 31 December 1985. It was discontinued due to hyperinflation, and the subsequent currency were called "new shekels" or simply "shekels" today (code: ILS), with a completely different sign (nu 20AA).

The symbol did not appear on the banknotes or coins themselves, but rather on the checks from the Bank of Israel. It was designed to be a stylized letter shin (v) shaped like a cradle. The name of "shequel" is a misspelling of "shekel" however the proposed character maintains such a mistake to be consistent.

The old shekel sign was not encoded, even though the new sign was called with the adjective "new". Perhaps due to its short life, there isn't (and wasn't) a lot of interest in general to represent it. I still propose it to be encoded, because I can't think of a good reason to exclude it.

Sources: (<u>3</u>) (<u>4</u>)

SOM SIGN. The word "som" was the name given to the soviet ruble, by speakers of many languages that were under soviet control, like Kazakh, Kyrgyz and Uzbek (it means "pure" as in pure gold, in all those languages as well as Uyghur). Today, two countries use currencies called "som", Uzbekistan and Kyrgyzstan; Kazakhstan uses a currency called the tenge (code: KZT), with its own symbol (T 20B8).

Uzbekistani so'ms (code: UZS/they spell it with an apostrophe) use a sequence of two Cyrillic letters (лв) that was also used by Kyrgyzstan. However, Kyrgyzstan has approved a new official symbol for their soms (code: KGS) in 2017. It consists of an underlined capital Cyrillic letter Es.

Sources: (<u>5</u>) (<u>6</u>)

While the sign can be composed with the letter, followed by the combining low line, it still merits dis-unification. This is due to the fact, that applications that deal with currency, usually do not have a very good rendering system, and so the sign would not display correctly. Furthermore, the sign is composed exclusively of a Capital sans serif letter, so having a separate codepoint, would protect against undesired glyph changes.

There is also a small risk that a perception of unfairness, would start amongst the Kyrgyz towards Unicode, since the TENGE SIGN was encoded for the Kazaks, even when the POSTAL MARK ( $\overline{\top}$  3012) was almost identical (the only difference being the inherent width).

Since it is a possibility that Uzbekistan may also adapt the sign (due to a growing friendship with Kirgizstan), using the more generic name: SOM SIGN, is better than to specify anything particular to Kirgizstan.

Sources: (7) (8)

**TRANSNISTRIAN RUBLE SIGN.** The republic of Transnistria, is a de facto state, with very limited international recognition. It declared independence from Moldova in 1991, however Moldova still considers it to be part of their territory.

Transnistria does a lot of things an independent state does, including issuing their own currency, separate from the Moldovan leu (code: MDL). They are also called rubles, due to its affinity to the Russian language.

The symbol was designed by Yury Kolodny from Belarus, and was approved in 2012. Today there is even a statue in the shape of the sign, outside the national bank. It was made to commemorate the 20<sup>th</sup> anniversary of their ruble in 2014 (the sign was only two years old at that point).

The glyph is inherently in italic style.

Since the country is not recognized by anybody but other unrecognized states, an official ISO code is lacking. Two informal codes are used: PRB (which would otherwise be reserved for Puerto Rico) and RUP (which is used by the national bank and would presumably be the preferred one overall).

Sources: (9) (10) (11)

The problematic political status of Transnistria is not an excuse to avoid encoding. Plenty of symbols were encoded despite their potential <u>controversy</u>. Scripts have been encoded for persecuted minorities, like Hanifi Rohingya. And even many ancient currency symbols without any ISO codes were encoded.

Encoding the sign would greatly benefit, approximately 469,000 inhabitants of Transnistria.

Suggested editorial changes.

#### 0042 \$ DOLLAR SIGN

# = milréis, escudo

- Used for many peso currencies in Latin America and elsewhere
- 20C0 \$ is preferred to represent escudo currencies
- The glyph with one vertical bar is preferred to distinguish it from the escudo sign
- Often used as a generic currency sign, instead of 00A4 ¤
- Other currency symbol characters start at 20A0 9:
- → 00A4 ¤ currency sign
- → 20B1 ₱ peso sign
- → 20C0 \$ dollar sign with two strokes (escudo sign)
- → 1F4B2 \$ heavy dollar sign

#### **00A3 £ POUND SIGN**

- = pound sterling, irish punt Italian lira, Turkish lira, etc.
- Several currencies have used this sign, including the Italian lira and the Turkish lira
- ullet The glyph with a single crossbar is preferred to distinguish it from 20A4  ${f \pounds}$
- → 20A4 £ lira sign
- → 20BA ₺ turkish lira sign
- ightarrow 10192  $\Sigma$  roman semuncia sign

#### 00A5 ¥ YEN SIGN

- = yuan sign, renmimbi sign
- Japan, People's Republic of China
- Glyph may have one or two crossbars, but the official symbol in Japan and China has two
- The sign is formally used today, by the PCR and Japan in international contexts
- However in other contexts in East Asia, the use of a single ideograph to act as the currency sign, may be preferred. Exactly what ideograph is used depends on the context, place and time.

- All the ideographs referred here, correspond to all ideographs, that were once used to refer to the base unit, of at least one of the directly related currencies, derived from the ancient yuan (renmimbi, yen, ancient won, Hong Kong dollar, Taiwanese dollar and Macanese pataca)
- <mark>→ 5143</mark> 元
- → 5186 円
- → 5713 圓
- → 571C 還
- <mark>→ 5757</mark> 块
- <mark>→ 6BDB 毛</mark>
- → 7B8D 箍
- **→ 9820** 銀
- → FFE5 ¥ fullwidth yen sign

### **20A4 £ LIRA SIGN**

- Italy, Turkey
- Legacy character intended for the Italian and Turkish liras, but not widely used
- Preferred character for lira-is 00A3 £
- Unlike 00A3 £, this characters is always shown with two strokes
- $\rightarrow$  00A3 £ pound sign
- → 20BA ₺ turkish lira sign

### 20A9 ₩ WON SIGN

- Korea
- Glyph may have one or two crossbars, but the most common form in Korea has only one
- → C6D0 원 hangul syllable weon

→ FFE6 ₩ fullwidth won sign

# 20AA № NEW SHEQEL SIGN

- Israel
- A more correct spelling would be "shekel"
- → 20C1 **V** old sheqel sign

## **20B4 ₴ HRYVNIA SIGN**

- Ukraine
- Based on the italic form of the small Cyrillic Ge 0433 (2) enlarged
- $\rightarrow$  0433 r cyrillic small letter ghe
- → A644 & cyrillic capital letter reversed dze
- → 10194 <del>2</del> roman dimidia sextula sign

### **20BD ₽ RUBLE SIGN**

- Russia
- → 0420 P cyrillic capital letter er
- → 20C3  $\mathcal{P}$  transnistrian ruble sign

## 20BE ₾ LARI SIGN

- Georgia
- → 10DA ლ georgian letter las

Proposed new characters.

# 20C0 \$ DOLLAR SIGN WITH TWO STROKES (ESCUDO SIGN)

- = (escudo sign,) milréis, Cifrão
- Cape Verde
- Former symbol of currencies in Portugal and its former colonies
- Unlike 0042 \$, this character is always shown with two strokes
- Functions as a decimal separator

(\* Informally used (in conjunction with 0042 \$) to distinguish dollar currencies from peso currencies, that would otherwise be confusable)

→ 0042 \$ dollar sign

# 20C1 OLD SHEQEL SIGN

- Short lived currency of Israel
- A more correct spelling would be "shekel"
- $\rightarrow$  05E9  $\forall$  hebrew letter shin
- → 20AA n new sheqel sign

### 20C2 ⊆ SOM SIGN

- Kyrgyzstan
- → 0421 C cyrillic capital letter es

## **20C3 ₱** TRANSNISTRIAN RUBLE SIGN

- Currency of Transnistria: an independent part of Moldova with very limited international recognition
- The currency in question lacks a formal ISO code
- ightarrow 0420 P cyrillic capital letter er
- → 20BD ₽ ruble sign

#### Sources.

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Figure 1. Dollar signs with two strokes on Portuguese escudos



Figure 2. Contemporary use of the sign in Cape Verde

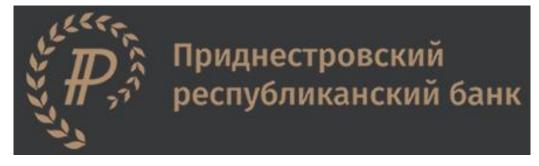


Figure 3. Use of the sign on the logo for the national bank of Transnistria



Figure 4. Transnistrians unveil the monument of their ruble in front of the national bank