

MINT NEWS QUARTERLY™

VOLUME 4 / SEPTEMBER 2017



The Disappearance of Small Denominations



The effect is widely known: the more something is repeated by the media, the stronger it is perceived. To what extent does this influence the perception of disappearing small denominations? How many denominations have actually disappeared in the last two years? How many new ones have been minted? This article provides an inventory.

Currency News issues a very useful handbook – the *Directory of Circulating Coins*, which summarises the basic technical data of all circulation coins and thus provides a good overview of what is being minted internationally. The first edition of this book was published in 2014. The second one came out in 2016.

Smaller denominations

There is hardly a mint in the world which is not worried about smaller denominations vanishing during the coming years. There is a lot of discussion going on in the media as to whether the benefits of the small denominations can actually justify their high production costs.

As part of a worldwide austerity policy, some politicians or central banks accept the media's suggestions and think about abolishing the smaller denominations. One recent example for this is Italy, as has been widely reported.

Indeed, the eurozone seems particularly active when it comes to the abolition of 1 and 2 cent coins. Finland and the Netherlands were the first to refrain from minting these denominations. Between 2014 and 2016, Ireland followed suit and, as mentioned above, Italy announced their abandonment of the two denominations in May this year.

This poses the question – is this a European or a worldwide problem? Because the USA for one seem to prefer another policy. After a cost-benefit analysis, the American government decided to keep bearing the high costs of the production of cents and nickels in order to spare the private sector the even higher changeover costs. Canada, on the other hand, has gone without the penny since 2012.

Continued on page 2 >

Self-Experiment with a Piggybank

There ought to be a number of people who, like myself, have a piggybank at home and feed it with their change. Eventually the thing will be full – and you have to take all the change to the bank.

There were 503 coins in my piggybank – 52 x 5 euro cents, 136 x 2 euro cents and 315 x 1 euro cents. The total sum amounted to a considerable €8.47.

There are four banks within a 3-kilometre radius of my flat. Three of them offer a service to cash out the coin money with a machine. Two of them offer this as a free service to their customers, so that I merely have to take the time to give them my change. The third charges €7.50 for this service.

Let's estimate 10 minutes for the single way to the nearest bank – and let's hope that this exact bank offers this service free of charge. Let's also conveniently estimate 10 minutes for waiting in line and actually taking care of the matter. Then the entire procedure will have taken about half an hour of my time.

I make a bit more than the German minimum wage, but even at €8.84, my labour costs would amount to €4.42. Thus my €8.47 is reduced to as little as €4.05. If I chose a bank that charges for this service I would even have to pay extra.

Can anyone tell me, therefore, why I shouldn't just throw all of this change in the garbage?

In other words – whoever wants to keep smaller denominations circulating has to make sure that consumers have the opportunity to feed them back into circulation in a useful way.

Ursula Kampmann, Editor

The Disappearance of Small Denominations *(Continued)*

In order to obtain a clearer picture of the situation, there is nothing to be done but simply count. Which countries have abolished smaller denominations between 2014 and 2016? And in what relation does their number stand to the number of countries who have kept their denominations the way they were?

According to the chart below, 20 out of 181 states have axed one or two smaller denominations during the last two years. A total of 30 denominations have disappeared worldwide. Two of these were circulating in heavily populated countries: Brazil and Indonesia. Six are not material, as the number of people who use them is below one million inhabitants.

Coin-note-boundary

What does it look like on the other side? How many countries have extended their denomination system and introduced larger denominations? Have these new denominations already been minted or introduced into circulation, or has their introduction merely been planned?

There are inherently fewer large denominations introduced than smaller denominations abolished. As can be seen from the other chart below, in total, only nine countries have shifted the coin-note boundary upward. Only one of them is a heavily populated country, namely Mexico. Four of the nine countries have a population of less than one million inhabitants.

It is interesting that nine countries have been planning to mint a larger denomination but some of them have been doing so for more than two years. One might ask why they have not yet started to implement these plans.

The numbers confirm the notion

Thus 30 denominations have disappeared, compared with 12 new ones introduced. The difference increases, considering that the countries that have reduced their small denominations are inhabited by 863.66 million, compared to a population of 195.83 million in the countries which introduced larger denominations.

An analysis according to mintage could not be done as the mintage of circulation coins in many of these countries is unknown. The dimensions of the decrease in mintage can be estimated by means of the mintage of the Brazilian centavo from 2001-2004.

2001	242,924,000
2002	161,824,000
2003	250,000,000
2004	167,232,000

Mintage of the Brazilian centavo.

A shift of mintage

In conclusion, there is a tendency that goes away from the mass mintage of smaller denominations toward minting more upmarket, quality large denominations. There seems to be a general interest in introducing these new denominations. It should be a (rewarding) task for the minting industry to convince governments and central banks to realise the issue of larger denominations.

Smaller denominations abolished

Country	Denomination(s)	Last minted	Population (millions)
Barbados	1 cent	2012	0.28
Brazil	1 centavos	2004	204.86
Comoros	5 francs	1992	0.79
Cook Islands	1, 2, 5 cents	2010	0.02
Gibraltar	1, 2 pence	2012	0.03
Honduras	1, 2 centavos	1992 / 1974	8.89
Indonesia	1 rupee	2007	255.46
Iran	50 rials	2006	79.93
Ireland	1, 2 cent	2016	4.78
Italy	1, 2 cent (planned)	2015	60.6
Jamaica	1 cent	1971	2.97
Kenya	50 cents	2009	46.79
Lesotho	2 licente	1992	1.95
Madagascar	5 ariary	1996	23.57
Nepal	50 paisa, 5 rupees, 10 rupees	2004, 1996, 1994	29.19
South Africa	5 cents	2012	54
South Korea	1 won, 5 won	2012	50.5
Tonga	1, 2 seniti	2006 / 2004	0.1
Tunisia	5 millims	2005	11.3
Vanuatu	1, 2 vatu	2002	0.26
Yemen	1 riyal	1993	27.39

Larger denominations introduced

Country	Denomination(s)	In the planning stage	Population (millions)
Angola	20, 50, 100 kwanza		1.25
Bulgaria	2 leva		7.14
Burundi	100 francs	x	11.01
Comoros	250 francs		0.79
Cook Islands	2 dollars, 5 dollars		0.02
Gibraltar	5 pounds		0.03
Honduras	1 lempira	x	8.89
Maldives	5 rufiyaa	x	0.34
Mexico	20 pesos		123.17
Nepal	5 rupees	x	29.19
Panama	2 balboa	minted, not in circulation	3.93
Russia	25 rubels	x	17.08
South Sudan	1 pound, 2 pounds	x	12.53
Sweden	2 kronor		9.86
Syria	50 pounds	x	15.00
Tanzania	500 shilingi		53.47
Tonga	1 pa'anga		0.10
Venezuela	2 bolivar	x	30.93

Sack & Kiesselbach Showcases the TMA350 in Poland

Sack & Kiesselbach (S&K) has developed an oil-hydraulic press to meet the needs of modern coin production after evaluating customer surveys for two years. The TMA350 will be on display at the Mint of Poland during the Coin Conference™ in Warsaw (which takes place 23-25 October).

The market for coin collectors has markedly changed over the past years. There has been a significant increase in the demand for high-quality commemorative coins with a low mintage, equipped with special features, and commenting on recent events. Newly designed to meet customers' requirements, S&K's TMA350 has responded by combining flexibility with high speed and high precision. It is an ideal minting press for producing different series of high-quality coins and medals at a minimal set-up time.

Nothing new!

It's not news that (oil-) hydraulic minting presses are superior to mechanical minting presses when it comes to relief and precision. The full press force is 100% available at any stroke range and the press speed can be set in advance and varied as it can change during the minting process.

Multiple pressings are possible with the highest precision. That means an optimisation of the material flow of the workpiece. Perfect high-relief coins at the highest precision level are the result.

The even pressure means a longer tool lifetime. The fact that power is only required when active press force is needed minimises energy consumption.

The TMA350's new AC servomotor with energy-saving direct drive will enable energy savings of up to 50%. Further, it allows to set the desired pressing force very precisely with only marginal deviation of up to 2%.



Flexibility

Exchanging the tools for different denominations featuring various sizes is remarkably easy. An experienced operator can perform a complete change of format within 10-15 minutes, even changing between different medal and coin sizes.

Exchanging the coin die only takes a few minutes. This is possible by an optimised interplay of the necessary processes, to which the designers paid particular attention when constructing the press.

On customer request the TMA350 can also be equipped for bimetal feeding. Additional options include minting holograms, unround blanks and ingots.

All parameters are transmitted via the touch-screen control panel by Siemens. The operation is clear, simple, and self-explanatory so that operators only need a brief instruction.

Feeding the machine

Feeding options available on the TMA350 are manual, semi-automatic, and automatic. It is designed to process higher blank loads in the automatic mode, as before, without manual adjustment.

The TMA350 is equipped with a fully automatic 3-axis transfer for loading of coin trays with a pick & place unit, which effectively means that, depending on size, up to 600 coins can be embossed with a single load.

Measuring 3.15m wide, 2.25m deep, and 2.68m high, the compact TMA350 doesn't need a lot of space. Its ergonomic design further enables the operator to take a seated position with spacious legroom.

Everyone who has ever witnessed the installation of a minting press would be surprised by how easy this is with the TMA and how quickly it can be put into operation.

If you want to inspect the TMA350 in Poland, please register your visit at ognjenovic@sack-kiesselbach.de.

Pressing force (in kN)	100-3.500
Production capacity (parts/min)	15
Blank size up to (diameter/mm)	60 (in gold and silver)
Ram stroke (mm)	120
Closing speed (mm/sec)	200
Pressing speed (mm/sec)	4.1
Driving power (kW)	15

TMA350 technical data.

Mint of Poland – Profile



Name

Mennica Polska / Mint of Poland

Foundation

1766

Form of Organization

Stock company, owned completely by private investors

Holdings / Activities

Mint products
Precious metal processing
Electronic payments
Construction development operations

CEO

Grzegorz Zambrzycki

Head of Production

Siemowit Kalukiewicz

Turnover (complete)

882,371 million PLN

Size

Production hall – 7,800 m²

Capacity per year

Circulation coins: 3 billion

Milestone products

3D coins

Certificates

PN-N-18001:2004; BS OHSAS; ISO 14001:2004; ISO: 9001:2008

Clients

Domestic and international customers, including Narodowy Bank Polski (the National Bank of Poland), along with the central banks of the Dominican Republic, Colombia, Armenia, Georgia, Belarus, Thailand, Uruguay, Paraguay, Lebanon, Guatemala and many more.

Continued on page 4 >

Why Can't We Rid of Change in Vending Machines?

Have you been to Spain, recently? When paying your parking ticket at, for example, a parking garage, you can insert all your 1 and 2 cent coins in order to complete the amount. In this way, a lot of small denominations re-enter circulation. Why do Spanish vending machines take small change? And why do others not?

We asked Erwin Wetzel, Director General of the European Vending Association.

In the vending industry there is a harmonised acceptance for low denomination coins across Europe and therefore the vast majority of coin validators/changers accept 5 to 50 euro cent coins. No matter the price differences between the different eurozone countries, vending operators will mostly round the price to the lower or higher decimal in order to avoid giving change in 1 and 2 euro cents.

In very rare cases, it could occur that the lowest denominations are accepted, but in general this is not standard. Indeed, you have to take into account that if a change giver is equipped with only 5 tubes, it is better to work with less denominations to ensure that enough change can be given to the consumer during a longer period.

Basically, operators will practice prices which are easy to work with and which are also convenient for the consumer. If you sell a snack for €1.85, there is a high chance that the consumer will introduce two €1 coins or one €2 coin. In this case, the change giver will have to give back one 10 cent and one on 5 cent coin. If the price is set at €1.9, only one coin is needed. So it is all a question of efficiency.

Recently, the Euro Coin Sub-Committee of the European Commission – in which the EVA Coin Group is an active contributor – announced that a new series of 1, 2 and 5 euro cent coins will be released by the end of this year.

There will be slight changes of the outer copper layer of those coins. Since 5 cent coins are used in vending, a smaller copper layer was agreed in order to prevent an adaptation of field-based equipment. However, we recommend adapting the coin sensors in cases where customers complain about acceptance problems in the fieldbase and to adapt new equipment.

The introduction of the modified 1, 2 and 5 cent coins will be very slow as some euro countries have no orders for these new coins, and other countries such as Germany have fixed contracts for the next years to produce according to old specification.

Furthermore, some countries such as the Netherlands or Finland are currently getting rid of 1 and 2 euro cent coins in their production. These denominations are still used in the cashless system, but if a consumer wants to pay cash, he will have to pay either 3 cents more or 2 less, because the price will be rounded by 0.05.

So, if the price is €2.22, the cash price will be €2.20, but if the initial price is €2.23 then it will be rounded to €2.25.

Ever more states are trying to get rid of low denomination coins and therefore it is also not in the interest of our industry to accept them if their circulation rate is shrinking.

MINT NEWS QUARTERLY™

Publisher: Currency Publications Ltd in association with Monea.



Editor:

Dr Ursula Kampmann (left)

Translator:

Dr Annika Backe

Mint News Quarterly™ is produced every three months and only distributed with *Currency News™*.

10 Windmill Business Village,
Brooklands Close, Sunbury,
TW16 7DY, UK

www.currency-news.com

 **monea**
PUBLISHED IN ASSOCIATION WITH MONEA

No part of this publication may be reproduced, stored in a retrieval system or translated in any form or by any means – electronic, mechanical, photocopying, recording or otherwise – without the prior permission of the copyright holders.

The copyright is owned by the author. If no author is mentioned the copyright is with Dr. Ursula Kampmann.

COPYRIGHT 2017. ALL RIGHTS RESERVED

Sponsors

H2O

LANG

SACK & KISSELBACH

SPALECK
Oberflächenstechnik

Mint of Poland *(Continued)*

Awards Received

2015: Coin Constellation, Moscow:

1st place Coin Classic category: 'Polish Olympic Team Sochi' 2014, 200 zł

3rd place in Series of the Year category: 'The Oldest Trees of the World', 100 dram

3rd place in Original Technology category: 'Saint John Paul II' 25 dollars

2015/2016: COTY (Coin of the Year)

Most Inspirational Coin: 'Centenary of the Birth of Jan Karski', 10 zł

2016: MDC Bangkok

The most technologically advanced silver coin (other coin): 'Seven New Wonders of the World', NZ\$7

Marketers' Choice Award for the best packaging: 'Seven New Wonders of the World', NZ\$7

3rd place in Best Package to Encourage Collecting category: 'The Most Beautiful Galaxies' series

2016: Coin Constellation, Moscow

Second Award, Unique Concept: 'Chopin's Score', NZ\$20

Special Remarks

Disposes of over 100 coin production techniques; modern and highly efficient coin presses and a fully-automated packaging line.

In One Sentence

'Being an undisputable leader in the high-end technologies, the Mint of Poland sets new standards in the field of monetary art.'

www.en.mennica.com.pl