The Matheo Solution (TMS)

Introduction

Q. What is 'The Matheo Solution (TMS)'?

The Matheo Solution (TMS) is a comprehensive and *'common sense'* proposal to solve the Euro (zone) crisis, and is as well a *'blueprint'* for a bright and prosperous future for the Economic and Monetary Union (EMU), the Euro (zone) and *all* Euro-countries.

Within the existing EU-Treaty legal and economic framework of *'Sustainable price-stability'*, *'Individual responsibility'*, *'No-bail-out'* and *'Fair competition'*, TMS concentrates on realizing 4 objectives:

A. Sustainable sound real economic growth, in all Euro countries
B. Solid and sustainable state finances in all Euro countries
C. A solid and stable financial system in the Euro zone
D. The Euro to finally become an reliable, stable, strong and lasting international currency.

The main achievements of TMS are:

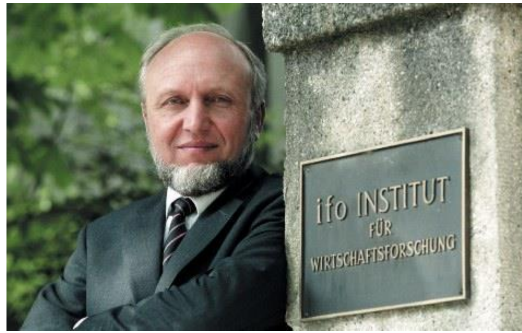
- *the 'Euro Currency Units-Exchange rate Mechanism (ECU-ERM)', and*
- *the 'European Bank for Bank Capital Support (EBBCS)'.*

Q. Who created TMS and where does the name 'The Matheo Solution (TMS)' come from?

TMS was first published in 2010 by Dutch Euro-researcher *André ten Dam*. Ten Dam is assisted by two volunteers: *Pieter Levenbach* and *Hans Sturkenboom*.

André ten Dam and his son Matheo

Ten Dam named his solution for the Euro (zone) crisis and the future of the Euro after his son *Matheo*, who was born in 2010. He picked 'Matheo' as the representative of all future European generations.



Professor Hans-Werner Sinn, President IFO Institut

On the initiative of the prominent German economist ***Prof. Hans-Werner Sinn***, in 2011 TMS was brought into the international scientific economic debate by the prestigious *'IFO- Institute'* (Munich - Germany).

Q. Why is The Matheo Solution presented as a 'comprehensive' plan?

TMS proposes solutions for ALL the weaknesses and structural flaws of the present Euro Pact. TMS is therefore a blueprint for the future of EMU and the Euro as well. Since its presentation in 2010, several TMS-proposals have been adopted by many economists and have been implemented in some form by European authorities. But the two most important proposals (the ECU-ERM and the EBBCS) have not yet been widely accepted or implemented.

The Euro Crisis

Q. What is the cause of the Euro (zone) crisis?

The Euro was introduced as a *'one-size-fits-all'* currency. But, as we have all witnessed, the Euro does not function properly as the *single* currency for widely diverging countries. The participants in the Euro are very diverse. The reality of the Euro turned out to be: *'one-size-fits-none'*!

Because the economies of the Southern Euro-countries simply can not follow the stronger economic development in the core-countries, from the introduction of the Euro the Southern economies lost their (international) competitiveness. This increasing lack of competitiveness was intensified by an excessive rise of the wages in the Southern countries vís-á-vís the development of the wages in the stronger countries.

In addition, since the introduction of the Euro, the financial markets financed the weaker Euro-countries and their private entities (State bonds and private loans) with low interest rates which encouraged excessive borrowing. The debt levels therefore became much too high and bubbles were created. And these bubbles started to burst.

Q. And are there any symptoms as well?

Because of the developed lack of (international) competitiveness, the economies of the weaker Euro countries declined. These economies collapsed, with economic decline, private bankruptcies, mass unemployment, poverty, social unrest and political instability as the results. Basically the Euro currency became much too expensive for these countries, threatening their economic survival. Capital from (international) investors started to flow out of the weaker countries with the risk of implosion of the respective national financial systems. And the one-size-fits-all structure of the Euro has made it impossible to apply the necessary (urgently needed) *monetary devaluations* and *interest-rate-differentiation* on a national member state level.

Because of the economic misery in the Southern countries the core-countries have lost important export markets for their products and services, so the core-countries have been drawn into the misery as well. Additionally, the financial markets pushed the interest rates on public and private debts in the Southern Euro-countries to realistic levels, causing the bubbles to burst. The debts became unsustainable and will have to be reduced. As the result, the creditors of the debts (mainly the European banks) experience overwhelming solvency problems, and therefore a substantial part of the European banks are basically bankrupt.

So the present one-size-fits-all Euro Pact turned out to be self-destructing for all Euro countries and the European financial system.

Q. Can the Euro (zone) be saved?

None of the initiatives of recent years (EFSF, ESM, LTRO's, ECB-actions, Banking union etc.) have worked properly, because they do not solve the underlying 'structural' problems and defects. In fact, we can all see that the crisis continues to escalate. *'Muddling on'* best describes the present strategy of European leaders.

There is no popular support for transferring more power to 'Brussels', or creating a unsustainable permanent 'Transfer Union'. The popular resistance is justified, also because too many decisions are made in an undemocratic way. And there is insufficient democratic control over most centralized institutions.

But the Euro *can* be saved. The Euro Pact needs several adaptations. Most importantly, *mechanisms* must be introduced that bring the urgently needed *monetary flexibility* into the system.

First, nations with an uncompetitive, weak economy must be offered means to recover besides reforms. And second, national economies with a more or less equal competitive strength but with a different character must be offered means to differentiate their interest rates.

Therefore a system for *monetary devaluation* (an exchange-rate-mechanism) and *interest-rate-differentiation* on a national member state level are absolutely necessary.

Q. So what is then the problem?

The problem is that the aforementioned necessary *monetary flexibility on a national member state level* can only be achieved by a return to the former national currencies. According to the most mainstream economists, this would mean the end of the Euro (zone).

The first problem then is that the European political elite wants to *preserve* the Euro (zone) at all cost, because they see the Euro as *the symbol of post war European unity*.
The second problem is that, according to the EU-Treaty (article 128 TFEU) the Euro is *the sole legal tender* (= Euro bank notes) in all Euro countries. Thus the return to the former national currencies would mean that a *Treaty change* is inevitable. And that will take many years.

And the third problem is that almost all mainstream economists lack *creative thinking*.

The Euro Crisis & TMS

Q. How does TMS solve the main problem?

The TMS core-concept is based on the *'functions of money'* theory. According to this theory 'money' has 3 functions:

1. *Medium-of-exchange (means-of-payment)*
2. *Unit-of-account (currency-unit)*
3. *Store-of-value*

Ad1. Money is used as medium-of-exchange for payment of goods & services, taxes and debits/credits. Money can operate as medium of exchange only when it is generally accepted in that role, either by law (legal tender) or by mutual agreement (bank money).
According to the EU-Treaty, the *physical* Euro (Euro bank notes) is the sole legal tender in the Euro zone. Euro coins are not defined as legal tender in the EU-Treaty, but are considered to be legal tender as well in practice. Bank money is treated as money simply on the basis of their general acceptability and its usefulness for *electronic* payment (settlement of bank accounts). However in the Euro zone 'bank money' is not 'legal tender'.

Ad 2. Money is also a common measure of value by expressing exchange value of all goods and services in money in the exchange market. By working as a unit of value, it is a unit-of-account (currency-unit) that facilitate business and trade.
The *'unit of account'* (currency-unit) of a currency such as the Euro is used for the determination of the level of prices and wages in a country/currency-area vis-a-vis that level in other countries/currency-areas. The currency-unit is also the unit-of-account wherein *'debits & credits'* are nominated.

Ad 3. By means of money, people can store surplus purchasing power and use it whenever they want.

In the monetary history all three functions of money are tied together in currencies, such as the Euro, the US-dollar, Sterling etc.

The magic formula of TMS

The TMS formula however separates the ‘unit-of-account’ (currency-unit) function of a currency such as the Euro from the ‘means-of-payment’ (including legal tender) function of that currency. Then *new* ‘National Currency-Units (NCU’s)’ can be introduced alongside the already *existing* ‘Euro Currency-Unit (ECU)’.

In full compliance with the EU-Treaty, the Euro can then remain the sole *‘means-of-payment’ (including legal tender)* in all Euro countries ….and the *‘symbol’* of the post-war European unity.

And with these new ‘National-Currency-Units’ the ‘Euro-Currency-Units-Exchange-Rate-Mechanism (ECU-ERM)’ can be created. This ECU-ERM is an *innovative* (even scientific-economic revolutionary) but *simple* and *‘easy-to-implement’* exchange-rate-mechanism (on the basis of fixed but adjustable exchange-rates), with which the urgently needed system for *monetary devaluation* and *interest-rate-differentiation* on a national member state level can be introduced within the Euro Pact. The ECU-ERM is *‘ECB-managed’*.

This new *‘architecture’* for EMU and the Euro, is especially designed, suitable and essential for the diverse and economically divergent countries in the Euro zone. It will turn the European Economic and Monetary Union (EMU) into a *‘flexible’* union. And therefore it repairs the primary *flaw* of the present *‘rigid’* one-size-fits-all Euro Pact.

Obviously, because people are not yet familiar with such a new currency-system, the authorities will have to explain it properly to the European citizens and companies. Because the system is quite simple, everybody will get used to it very soon.

Because the Euro was intended to be a strong currency (just like the former D-mark) and EMU was intended to be a low inflation currency area (according to the monetary-economic policy of the German Bundesbank in the pre-Euro area and that of the ECB since the introduction of the Euro), the ECU will be pegged to the NCU of the economically strongest Euro country.

With TMS the Euro *can* finally become a reliable, stable, strong and lasting international currency, and as well an international reserve currency (with global political benefits for Europe).

Additionally, the national economies of troubled Euro countries should be reformed under the supervision of the IMF (possibly in conjunction with the World Bank). Investment programs should be financed by (international) private parties and supported by the European Investment Bank (EIB).

See also the item ***‘About The Matheo Solution’*** on this website:
http://thematheosolution.blogspot.nl/p/about-matheo-solution-tms-tms-presented.html

Q. What is the TMS-cure for the solvency problems of the indebted countries?

First, because of the ECU-ERM system, the State budgets of the weaker Euro countries and the capacity to repay State debts (even those nominated in Euro) by these countries will improve. See also the answer to the question ***’How do we know that the TMS core-concept will be effective?’*** below.

Second, if nevertheless the level of the national State debt of a Euro country is still too high, these national State debts should be reduced to sustainable levels by means of ‘clean hair-cuts’ (‘IMF Insolvency Pact’ with ‘Controlled Defaults’). Emergency loans to problem countries will only be made by the IMF (with the financial support of Euro countries *and* non-euro zone countries).

Q. How does TMS secure the stability of the European financial system?

The economies of the weaker countries will recover as a result of the monetary devaluations (on the basis of fixed but adjustable exchange-rates). And when economies recover, banks will profit immediately and their capital positions will strengthen.

TMS proposes an 'ECB Safety-Net' for European (system) banks that will experience liquidity and capital problems.

Liquidity support has already been executed in some (wrong and overkill) form by the LTRO’s of the ECB.
For the required recapitalization, TMS offers a 3-step approach: First aim to attract private capital. If that is insufficient, then consider (partial) nationalisation.

And if that provides insufficient perspective, TMS proposes an *innovative* European concept to rescue troubled *system* banks. For this purpose the ’European Bank for Bank Capital Support (EBBCS)’ should be established. It is effectively a capital support fund, which is to be financed by the ECB (ECB = ‘The Lender of Last Resort’ with unlimited means) and which secures the stability of the Euro zone financial system. The EBBCS provides capital to troubled banks, in exchange for shares. These shares will serve as collateral to the ECB. Because these finances are only used for capital support, there will not be an inflationary effect.

As soon as these banks have recovered and can obtain sufficient capital normally, the temporary capital support will flow back to the EBBCS. And the EBBCS will repay the ECB-loans.

Dr. Thomas Mayer (Deutsche Bank)

Thomas Mayer (2012) also proposed such a concept and called it a 'Bank Union'. The main differences are that the EBBCS is financed by the ECB, while Mayer's 'Bank Union' is financed by the EFSF/ESM, and that the EBBCS is restricted to *system* banks. Thus the EBBCS saves taxpayers' money.

TMS introduces a *'smart'* (ECB-financed) bank union for the recapitalization of 'troubled' European system-banks in the last (European) stage. This to prevent bankruptcy of European system-banks, thus to avoid destabilization of the financial system.

The *'ECB-financed'* EBBCS is a smarter, fairer and 'taxpayers'-money-saving', thus better, alternative for the *'ESM-financed'* model which the European political leaders in 2012 decided to implement.

The European bank supervision will be assigned to the EBA (and therefore be taken away from the ECB). The EBA will execute this task in consultation and in coordination with the respective existing national supervision authorities. A bank resolution regime for bankrupt non-system banks should also be established via which the holders of bank deposits will obtain the highest preferential creditor status.

Q. So, the ESM and Eurobonds are not needed?

Correct. The ESM can be terminated immediately. The 'No-bail-out' clauses will revive and have to be maintained and - if necessary - strengthened. Euro-bonds will not be needed and will not be permitted.

For a full coverage of TMS, see the item *'**About The Matheo Solution**'* on this website:
http://thematheosolution.blogspot.nl/p/about-matheo-solution-tms-tms-presented.html

The 'Economics & Laws' of TMS

Q. What is so special about the TMS?

The TMS model basically is a parallel currency model in which the Euro serve as the common parallel currency alongside the national currencies. However the national currencies have *only one* function of money: the 'unit-of-account' (currency-unit) function. And the Euro can remain to be the sole means-of-payment (including legal tender) in all Euro countries.

Therefore TMS does *not* require the necessity of a *'full political and fiscal union'* nor a *'money transfer mechanism'* within the Euro Zone (to absorb asymmetric shocks) for EMU and the Euro to survive and succeed. …..And TMS therefore gives as well a *new* dimension to the *classical* 'Optimal Currency Areas (OCA)' theory, presented by *Nobel laureate Robert Mundell* in the 1960's, concerning a successful and lasting monetary union.

TMS also perfectly fits the 'E Puribus Unum' (Out-of-Many-One) principle on which the Euro is based, and as well the 'In Varietate Concordia' (United-in-Diversity) principle on which the *'European Union (EU)'* has been founded.

In the *hypothetical* situation that the national economies of all Euro countries would once be and would always remain 100% convergent, there will be no need to use the mechanisms of TMS (realignment of the NCU's vis-á-vis the ECU/Euro and interest-rate-differentiation on a national level). In such a *hypothetical* situation one-size would fit all.

Q. Is the TMS model a parallel currency model?

Yes and no. The TMS model is a parallel currency model. However it is an *innovative* parallel currency model in which the national currencies *only* function as currency-*units* (units-of account) and in which the Euro will be the sole means-of-payment (including legal tender) in all Euro countries. In fact in the TMS model the Euro will function as a common European currency parallel to the national currency-units and as the sole means-of-payment (including legal tender) in all Euro countries.

Having said this we should go back in history:

1. In 1975 thus long before 'The Maastricht Treaty', the 'Commission of the European Communities' installed an 'expert group' to research and explore the possibilities of a *European monetary union* and a *European common currency*: the so called 'OPTICA GROUP'. In their 1976 report these European experts advised that, if the European politicians should decide to establish a European monetary union with a common European currency, they should build in a 'safeguard' for the economical divergent member states. National orientated monetary policies should remain in tact, to avert 'accidents' such as national economical crises and national mass unemployment. Therefore a common European currency should be introduced as an 'parallel currency' alongside the then existing national currencies. And a European central bank (which would issue the European parallel currency by means of the traditional monetary policy instruments) should be independent similar to the independence of the German Bundesbank.

   See on this website: ***'Scientific publications involving other relevant proposals'***
   http://www.thematheosolution.eu/1.3.pdf

2. In 1979 the former 'European currency-unit (ECU)' was introduced as a basket currency-unit of the former currencies of the European Community member states, used as the unit-of-account of the European Community before being replaced by the Euro on 1 January 1999, at parity. The value of the European currency-unit was a *weighted average* of the exchange rates of all former EU currencies. The weight of each currency was determined by the relative importance of the GDP of each EU country in the aggregate GDP of the EU, as well as the share of each EU country in intra-community trade transactions. This European currency-unit itself replaced the 'European Unit-of-Account', also at parity, on 13 March 1979. The European currency-unit was also used in some international financial transactions, where its advantage was that securities denominated in ECU's provided investors with the opportunity for foreign diversification without reliance on the currency of a single country.

Approximate national currency weights to the ECU value

Currency	13.03.1979–16.09.1984	17.09.1984–21.09.1989	21.09.1989–31.12.1998
BEF	*9.64%*	*8.57%*	*8.18%*
DEM	*32.98%*	*32.08%*	*31.96%*
DKK	*3.06%*	*2.69%*	*2.65%*
ESP	–	–	*4.14%*
FRF	*19.83%*	*19.06%*	*20.32%*
GBP	*13.34%*	*14.98%*	*12.45%*
GRD	–	*1.31%*	*0.44%*
IEP	*1.15%*	*1.20%*	*1.09%*
ITL	*9.49%*	*9.98%*	*7.84%*
LUF	–	–	*0.32%*
NLG	*10.51%*	*10.13%*	*9.98%*
PTE	–	–	*0.7%*

3. In the run-up to 'The Maastricht Treaty' (1990), The British Government (Margret Thatcher) – *in full compliance with this view* – proclaimed that for the establishment of *the European common currency* the then existing European Currency Unit (ECU) should turn into a 'hard' European currency, which would serve alongside, thus *parallel* to the then existing national currencies (the so called 'Hard ECU plan').

The British 'Hard ECU plan' (1990)

   See: ***'Maggie Thatcher, Hard ECU's, and the Euro zone shambles'***
   http://fistfulofeuros.net/afoe/maggie-thatcher-hard-ecus-and-the-eurozone-shambles/

4. The present 'éminence grise' of the German economic science, Prof. Roland Vaubel, in his younger years (1978) also followed this view.

Prof. Roland Vaubel (the 'éminence grise' of the German economic science)

See on this website: ***'Other relevant scientific publications'***
http://www.thematheosolution.eu/1.4.pdf

Therefore it is no surprise that Prof. Vaubel now proclaims that the Euro crisis should best be combated by the re-introduction of a parallel national currencies (starting in Greece) alongside the Euro:

Greece should now introduce a parallel national currency. To avoid a bank run and capital flight Euro deposits with Greek banks and euro cash ought to be guaranteed against devaluation (according to Vaubel the new drachme would devalue vis-á-vis the Euro with 28%). Since the Greek state is bankrupt, the other Euro states might wish to compensate the Greek banks for their devaluation loss which I estimate at € 5.6 billion (which is 'peanuts' compared to the costs of the present European financial support measures). All Euro countries ought to be free to introduce parallel currencies. …..In the long run, I favour an indexed parallel currency of stable purchasing power for all euro countries so as to strengthen currency competition and facilitate the formation of more efficient currency areas. Then the Euro in fact can be a solid and inflation proof basket currency of all the national currencies, such as intended in the 1970's.

See: the pages 62-64 of ***'The 2012 BVMW Euro crisis bundle'***:
http://www.bvmw.de/uploads/media/die_parallelwaehrung.pdf

When designing the TMS core-concept in March-April 2010, André ten Dam was not aware of the aforementioned history. He was inspired by the Euro zone monetary model from 1999 until 2002, when the Euro was introduced not yet as means-of-payment (including legal tender), but only as a currency-unit (unit-of-account). In these years the Euro-Currency-Unit (ECU) served alongside, thus parallel to the former national currencies.

And then these national currencies still had *both* functions of money: currency-unit (unit-of-account) *and* means-of-payment (including legal tender). In fact, Ten Dam placed this temporary monetary model in front of the mirror, with the TMS result:

1. The Euro with *both* functions of money: currency-unit (unit-of-account) *and* sole means-of-payment (including legal tender), and
2. National currencies with *only* the currency-unit (unit-of-account) function of money.

Interestingly, Oskar Lafontaine (the German Finance minister at the time the Euro was introduced) in April 2013 followed the view of the Euro as a *parallel currency* alongside national currencies, by stating:

Oskar Lafontaine (the German Finance minister at the time the Euro was introduced)

"We have to return to the former European Exchange Rate Mechanism, that enables revaluations and devaluations to bilateral agreements. …National currencies should be re-introduced ***parallel*** *to the Euro. ...I propose that we have to establish an organized process for revaluations and devaluations of the national currencies."*

Q. What does the TMS model mean for the Euro?

First, this means that, *in full compliance* with the EU-Treaty, the Euro can remain to be the *sole legal tender* in all Euro countries.

Second, this means that the Euro in its currency-unit function [Euro-Currency-Unit (ECU)] will remain to be *the sole unit-of-account* for all border crossing transactions in the Euro zone. So all border crossing transactions within the Euro zone will remain to be nominated in Euro, while all national transactions within a Euro country can and will be nominated in the respective 'National-Currency-Unit (NCU).

Third, this means that the Euro will be the European *'Key Currency'* within the 'Euro-Currency-Unit-Exchange-Rate-Mechanism (ECU-ERM)'.

Fourth, this means that the Euro can and (probably) will develop itself into the most powerful global reserve currency (with global political benefits for Europe).

So with TMS a ‘Euro (zone) break-up’ can be averted and the Euro and EMU *can* survive, while *respecting* the initial and existing EU-Treaty’s legal and economic framework of EMU (Sustainable price-stability, Individual responsibility, No-bail-out and Fair competition) and *realizing* the main initial objectives of:

A. Sustainable sound real economic growth, in all Euro countries
B. Solid and sustainable state finances in all Euro countries
C. A solid and stable financial system in the Euro zone
D. The Euro to finally become an reliable, stable, strong and lasting international currency.

In fact the ECU-ERM of TMS combines *‘the best of both worlds’*. First the ‘world’ of:

- *The Euro being the sole legal tender in the Euro zone and being the symbol of post-war European unity,*
- *The clear advantages of the Euro currency (sole means-of-payment, including legal tender) in daily practice,*
- *The Euro as an powerful international reserve currency, and*
- *Last but not least, the monetary ‘stability’ of the Euro as a single currency for all Euro countries.*

And second the ‘world’ of:

The clear advantages of the ‘flexibility’ of national monetary policies within the Euro Zone, via the urgently needed structure for ‘monetary devaluations’ and ‘interest-rate-differentiation’ on a national (member state) level.

Q. So, will TMS preserve the Euro as the sole legal tender in all Euro zone countries?

Yes. In full compliance with the Maastricht Treaty, TMS allows the Euro to remain the sole legal tender.

Q. Is the implementation of the TMS core-concept possible within the present EU-Treaty?

Yes. Because in full compliance with the EU-Treaty, the Euro can remain the sole legal tender in each and every Euro country. No Treaty changes are needed! So this model can be implemented even today.

The ECU-ERM of TMS can be implemented by simple (coordinated) National and European legislation.

Q. Is a currency-unit (unit-of-account) a ‘virtual’ currency?

No. A currency-unit such as the National Currency-Units (NCU’s) introduced by TMS just represents the unit-of-account function of money, according to the functions of money theory. It is not means-of-payment/legal tender.

Q. Why does TMS link the currency-units to Euro countries and not to the Northern and Southern European regions?

At the time Ten Dam was creating the ECU-ERM, he first thought to link the parallel currency-units (unit-of-accounts) to European regions: North (strong), Middle (middle) and South (weak). Obviously that can be done as well.

However, because EMU is formed by the National political, economic and legal entities of the sovereign Euro countries (which all have their own national governments and parliaments and with their own legal national responsibility and authorization for national economic policies) and because there are differences between the economies of the stronger and between the economies of the weaker countries as well, Ten Dam finally decided to link the parallel currency-units (units-of-account) to the sovereign National Euro countries.

Q. In what way the Euro/ECU should be pegged to the National-Currency-Units?

At the time Ten Dam was creating the ECU-ERM he had decide how the Euro/ECU should be pegged to the NCU’s of the Euro countries. There are 3 possibilities:

1. To peg the Euro/ECU to the NCU of the Economic *strongest* Euro country.
2. To peg the Euro/ECU to the NCU of the Economic *weakest* Euro country.
3. To peg the Euro/ECU to an *weighted average* basket of all the NCU’s (Remember that the Euro was introduced in 1999 as the successor of the 1979 European currency unit, the *weighted average* basket of the exchange rates of all former EU currencies) .

All things considered, Ten Dam in 2010 finally decided that the value of the Euro/ECU should be equal and pegged to the value of the NCU of the economic strongest Euro country. Mainly because then the Euro will turn into a really *strong* currency, which gives the Euro the best opportunity to become the global reserve currency (with global political benefits for Europe).

Please note that the economic strongest Euro country is now Germany, but it can in the future be every Euro country. That depends on the future relative economic performance of all individual Euro countries.

Q. How do we know that the TMS core-concept will be economically effective?

TMS' ECU-ERM introduces a system of *monetary devaluations* and *interest-rate-differentiation* within the Euro Pact. So just like in other similar economic crises in the past the same effects can be expected from this remedy.

See: ***'Effects Of Implementing The Matheo Solution (TMS)'*** (2010-2011)
http://www.incassomeesters.nl/effects-of-implementing-the-matheo-solution-update2011.pdf

And research of recent monetary devaluations in South-Korea, Thailand, Brazil and Mexico proves that, in similar crises and circumstances (those national currencies were pegged to the US-dollar and became much too expensive), the combination-policy of *'reforms & monetary devaluation'* is very effective. The respective economies and State budgets did recover. The capacity to repay State debts and private debts did improve, *even those nominated in foreign currencies* (in some cases creditors had to sit still for a 'hair cut' to lower debts to a sustainable level). State finances recovered. And, in most cases, within a short time after those devaluations (when prices were set) inflation dropped to a level lower than the level in the pre-crisis years.

See: ***'Kelly van Heyningen'*** (2012)
http://www.uu.nl/faculty/leg/NL/organisatie/departementen/departementeconomie/onderwijs/yesuse/programmainhoud/Documents/The%20Matheo%20Solution.pdf
and see: ***'Eduardo Borensztein & José De Gregorio'*** (1999)
http://citeseerx.ist.psu.edu/viewdoc/summary?doi=10.1.1.202.925
and see: Paragraph A18-A20 (pages 104-110) ***'Capital Economics-Wolfson Economics Prize'*** (2012)
http://www.policyexchange.org.uk/images/WolfsonPrize/wolfson%20economics%20prize%20winning%20entry.pdf

If for instance Greece, Portugal, Spain, Italy and France were to devalue their NCU's (National-Currency-Units) according to the ECU-ERM model of TMS, their capacity to repay the existing State Debts will improve.

More economic activities, sounder companies and increased employment will obviously result in more tax revenues and better State finances for the respective countries, ….even when calculated in Euro!

Obviously the same applies to private companies with debts nominated in Euro. Instead of going bankrupt these companies will make profits! And the same applies to workers with private debts nominated in Euro, who have lost their jobs in this crisis. Because after the monetary devaluation in their country they will have far much better opportunities to get a decently paid job again instead of facing endless unemployment and poverty.

Q. How about the ECB?

In the TMS structure, the ECB will be politically independent and can focus itself, as any central bank should do, fully (and only) to the monetary-economic policies within the Euro zone, for the Euro-zone being *sustainable price stability*, *sound real economic growth* and *fair competition* in the whole Euro-zone and in each and every Euro country.

Within the monetary-economic policies mentioned above, the ECB will execute these tasks by managing the ECU-ERM, in consultation with the national central banks of the Euro countries. This management involves the regulation and determination of the exchange rates of the NCU's vis-á-vis the ECU (on the basis of fixed but adjustable exchange-rates), the interest rates of the NCU's and the money supply in the Euro zone.

To establish interest-rate-differentiation within the Euro zone, all deposit- and lending transactions between the ECB and the national private banks will have to be nominated in the respective NCU's.

The ECB will issue Euro's as an reserve currency to central banks and other global major financial institutions.

The European System of Central Banks (ESCB), in which the ECB and the national central banks of all 27 EU-countries participate, will continue to exist. The 'Euro nominated' Target 2 system will continue to exist as well (via Target 2 all the financial transactions between the participating countries are settled by the national central banks).

Q. How about existing and new debits/credits and the bank accounts within the Euro zone?

Because the Euro will continue to function as the currency for border crossing (trade) transactions within the Euro zone, all *existing* and *new* border crossing debits/credits will (remain to) be nominated in ECU/Euro.

Obviously the NCU of a Euro country determines the level of prices and wages in that Euro country vis-á-vis the level of prices and wages in the other Euro countries. This means that, according to the 'Lex Monetae', all *new* and *existing* national debits/credits (including interest-bearing bank deposits and bank loans) will be nominated in the respective NCU.

Incidentally, in 2010 Ten Dam first suggested that all *existing* national debits/credits should remain nominated in ECU/Euro. However because of new insights (such as the Lex Monetae) he changed his view and later (2013) he states that all *existing* national debits/credits (including interest-bearing bank deposits and bank loans) will be nominated in NCU.

Because according to TMS the Euro remains the sole means-of-payment in all Euro countries, all *existing* and *new* non-interest-bearing bank accounts (checking accounts for payment purposes) will (remain to) be nominated in Euro/ECU.

Because all existing non-interest-bearing bank accounts will remain to be nominated in Euro/ECU and the ECU will be pegged to the NCU of the economic strongest Euro-country, capital flights, prior to the introduction of the ECU-ERM of TMS, from banks in a devaluing Euro-country to banks in the non/less-devaluing countries will be limited. Moreover, there are other ways to prevent the possible temporarily capital flights. For instance temporarily capital controls (see the Cyprus precedent in April 2013) or a temporarily legislation involving that during the introduction until after the first NCU/ECU realignments in all Euro-countries the establishment of a new bank accounts is limited to residents and perhaps persons with the nationality of each respective Euro-country.

The introduction of the ECU-ERM of TMS can be arranged by simple legislation.

In 2012 prof. Roland Vaubel (who proposed the introduction of new national currencies *parallel* to the Euro) stated that all *existing* national debits/credits (including all banks deposits and bank loans), should be nominated in the new national currencies and that the losses in Euro for the holders of bank deposits in the devaluing countries at the first massive exchange-rates realignment would have to be excluded from devaluation. According to prof. Vaubel these losses should therefore be guaranteed by the respective Euro country. Ad if such a country could not afford such a guarantee, these losses should be guaranteed by the other Euro countries. In the case of Greece, prof. Vaubel calculated the amount of these losses at approximately € 6 billion Euro when the new Greek currency will devalue with 28% (in order to restore Greece's international competitiveness), which is 'peanuts' compared to the current financial European support to Greece since 2010 of approximately € 250 billion euro, without creating any perspective for Greece's economy and state finances to recover. This idea of prof. Vaubel off course could be an excellent support measure for the weaker devaluing Euro-countries because it would give a boost in purchasing power in the devaluing euro-countries.

Q. What does TMS mean for National State Bonds?

According to the 'Lex Monetae' all *existing* State Bonds would have to be nominated in the respective NCU. If existing State Bond contracts are ruled by foreign law (mostly British law) these existing State Bonds probably will have to continue to be nominated in ECU/Euro. *New* State Bonds can be nominated either in the NCU of the respective Euro country (domestic law) or in ECU (British law).

The market determines the interest-rates on the State Bonds of each Euro country. When nominated in NCU the market will obviously charge a higher interest rate if the chance (risk) of a NCU devaluation is higher or when the chance (risk) of repayment in full of the State Bonds is more uncertain. Obviously these are stimulus for each and every Euro country to execute sound national budgets and economic policies.

Q. If a country's NCU is devalued, will it not become more difficult to repay existing national State debts nominated in Euro/ECU?

This is a sometimes heard objection concerning TMS. At first sight it seems to be so. However:

First, this (alleged, see below) problem occurs in ALL strategies to tackle the Euro-crisis, either by means of *monetary* devaluations or by means of *internal* devaluations in the economic weaker Euro-countries for which the Euro is much too expensive. Because the current European political approach of *'reforms & internal devaluations'* to restore international competitiveness is *insufficient* (see also Angela Merkel, September 2012, to which Ten Dam refers in his BVMW-publication, page 56 of the BVMW-bundle, see the TMS-website), the *ONLY* effective way out is by means of *'reforms and monetary devaluations'*!.....And after the necessary reforms are successfully implemented and their national international competitiveness improve, the ECB then will have to *revalue* the NCU's of the weaker countries ....with the consequence that the Euro-nominated State Debts will be better bearable!

Second, all the international economic research and investigations of recent monetary devaluations in similar circumstances show us that in general the capacity to repay State Debts (even those nominated in foreign currencies) does not decline ..... but increases after the 'monetary' devaluation of the respective national currency vís-a-vís those foreign currencies . See the answer to the question ***'How do we know that the TMS core-concept will be effective?'*** above.

Third (and final), because *'If you can not pay your debts, you will not pay your debts'* we should all accept this and concentrate on how we can prevent the remaining consequences i.e. the possible threat to the stability of the European financial system. ....Because the pain will obviously be felt the most by the banks. ...

....Therefore TMS proposes the so called 'European Bank for Bank Capital Support (EBBCS)' for the recapitalisation of European system banks in the third (European) stage. The 'ECB-financed' EBBCS is a much smarter model for the recapitalisation of European system banks than the present ESM-financed Bank Union for that purpose.

Q. How about excessive wage inflation undoing the initial devaluation?

Some economist believe that monetary devaluations will be effective only temporarily, because a monetary devaluation would provoke excessive wage increases (vis-á-vis foreign countries) and therefore excessive inflation, undoing the positive effects of the initial devaluation.

According to research of recent monetary devaluations, these proclamations are not justified. See the answer to the question *'**How do we know that the TMS core-concept will be effective?**'* above. Obviously, whether such developments will happen or not, depends on the wage policies after the devaluation.

Because the main monetary-economic policy of the Euro Pact is 'sustainable price stability', there is no place (anymore) in the Euro zone for member states which would allow future excessive inflation caused by excessive wage increases (vis-á-vis foreign countries).

Q. Is there any risk of currency speculation?

No. As the NCU's are currency-units (units-of-account) and NOT currencies, by definition currency speculation is excluded.

Q. What are the (other) differences (advantages) between TMS' parallel currency-unit model compared to the regular parallel currency model?

Compared to the regular parallel currency model [for instance the well known 'Geuro' model proposed by *Thomas Mayer*, the parallel currency model proposed by *Bernd Lucke*, the 'GuldenMark' model (a new parallel currency for the Northern European countries proposed by *Markus C. Kerber* (supported by the former EU commissioner *Frits Bolkstein*), and the parallel currency model by *prof. Roland Vaubel*], the advantages of the parallel currency-unit model of the TMS core-concept are:

- *With the implementation of the ECU-ERM there will be no 'second rate' Euro (zone) member states. So there will be no division in the Euro zone of any kind.* **(*)**
- *Let's Keep It Simple (KIS). For the implementation of the ECU-ERM, there is no need for new physical national coins and banknotes. After a simple adaptation of the relevant software systems of the monetary authorities and financial markets, the ECU-ERM could be introduced on a very short notice.*
- *For the implementation of the ECU-ERM, an EU-Treaty change is not needed. In full compliance with article 128 TFEU, the ECB-issued Euro remains the only legal tender in all Euro countries.*
- *'Gresham' (bad money drives out good money) is not applicable to the ECU-ERM. So there will be no 'currency competition' of any kind.*
- *The ECU-ERM is managed by the independent ECB, on the basis of objective economic fundamentals.Thus there will be no unfair (overshooting) devaluations. And the necessary ECU-ERM devaluations will therefore also be immune for (national) political pressures.*
- *The ECU-ERM excludes 'currency speculation' (fixed but adjustable exchange-rates). And when the ECB executes its new tasks properly and promptly, there will also be no 'NCU speculation'.*
- *Because not a national authority but the ECB controls the money supply, 'sustainable price stability' is guaranteed in every Euro country.*
- *'Last but not least', the ECU-ERM will be integrated within the Euro Pact. So there will be no competitive/hostile monetary system alongside the Euro Pact. Thus the ECU-ERM should be acceptable for the Euro zone (monetary) authorities and pro-Euro politicians.*

(*) Not applicable on the parallel currency model by *prof. Roland Vaubel.*

See also on this website the item ***'The ECU-ERM model versus the 'Parallel Currencies' model'***:
http://thematheosolution.blogspot.nl/p/the-ecu-erm-model-versus.html

Q. Does TMS require dual 'price tagging'?

The introduction and the successful implementation of TMS' ECU-ERM model will obviously require proper preparation and explaining by the European and national authorities.

And perhaps as well (temporarily) dual 'price tagging' (in Euro/ECU and in the respective NCU) is required after a NCU realignment as well. Please note that Euro zone people and businesses are of course already familiar with temporal dual price tagging. At the introduction of the Euro as legal tender, we already experienced dual 'price tagging': in the Euro currency and in the respective former national currency.

Q. Can the ECB keep its mandate with TMS?

Yes. Because TMS delivers a properly functioning and self regulating Euro Pact system, also for the ECB there are no reasons anymore to go beyond its mandate (issues like breaking the no-bail-out clauses, taking in inadequate collateral for ECB loans and purchasing partly worthless State bonds to support the problem countries).

With TMS the ECB can concentrate on the management of the ECU-ERM in order to serve each and every Euro country's economy in the interest of all companies and all citizens in the whole Euro zone.

Q. Are the 'no-bail-out' clauses secured?

Yes. Because TMS delivers a properly functioning and self regulating Euro Pact system, there are no reasons anymore to break the 'no-bail-out' clauses.

Q. Will TMS strengthen the Internal Market?

Yes indeed. As with the implementation of TMS all Euro zone national economies and the European financial system will recover, the Internal Market will obviously profit and boost.

Q. What will TMS mean for the Euro zone stock exchange market?

Nothing. All the Euro zone stock exchanges can continue to be nominated in Euro/ECU.

Q. Is TMS easy to implement?

Yes, in fact TMS is *very* easy to implement.

Because the Euro continues to be the sole means of payment in all Euro-countries (both cash and Checking Accounts), the costs to implement the ECU-ERM of TMS are limited. Basically TMS only requires a simple adaptation of the software systems of the financial institutions, which can be done in a quiet weekend.

Q. Is there any better strategy than TMS to tackle the Euro (zone) crisis?

No. According to *'The Euro Solution Matrix'* (INMAXXA Research) TMS is, *by far*, the best of all available strategies to tackle the Euro (zone) crisis.

See: ***'The Euro Solution Matrix'*** (2012)
http://www.inmaxxa.nl/resources/site1/General/Euro%20Solution%20Matrix%20v23_7_2012%20Inmaxxa.pdf
and see: ***'Harry Geels'*** (2012)
http://www.inmaxxa.nl/columns/the-euro-solutions-matrix-ranking-the-eurorescue-proposals.aspx

Compared to all other available alternatives for the 'one-size-fits-none' Euro Pact, TMS distinguishes itself by the combination of monetary solidity, EU-Treaty compliance, practicality and political acceptance.

Democratic legitimacy (checks & balances)

Q. How about democratic legitimacy?

The ECU-ERM will be managed by the independent ECB.

To secure democratic 'checks & balances' (democratic legitimacy, mandate, method, transparency and control/supervision), the ECU-ERM management by the ECB should satisfy the following criteria:

- *The ECB should be independent of - and immune from - political influences.*
- *The ECB should execute the mechanism always after due consultation with the respective national central banks (which should be independent as well).*
- *The mandate should be democratically assigned to the ECB by European legislation supported by each and every national parliament. The mandate should be incorporated in the statutes of the ECB as well.*
- *This legislation (and therefore the adapted ECB statutes) should describe the respective ECB policies/targets (fair national exchange rates for fair competition and sensible national interest rates for sustainable price stability and solid economical development) and also the economic fundamentals (methods) used by the ECB to execute the mechanism. For these purposes the relevant OECD Main Economic Indicators (MEI) could be used.*
- *The ECB should execute this mechanism objectively and transparently. So the ECB should properly clarify each and every decision and always refer to its mandate and the method.*

- *If the ECB fails to execute the mechanism properly (or promptly) or goes beyond its mandate, there should be a court (judge) for democratic control/supervision and correction.*

The indicators of the economic fundamentals used for a realignment of the NCU's vis-á-vis the ECU obviously should include PPP's (GDP-deflator and cost-per-unit relative to other relevant countries), the current trade account deficit/surplus and the level of unemployment.

When 'Economics' and 'Politics' meet

Q. Why is TMS also politically acceptable?

Because, with TMS the Euro (zone) can remain intact. But that is not all. We should also realize and recognize why, on what political conditions and with which political goals the Euro was initially created. Therefore we have to answer the following questions:

1. *What was the political purpose of the Euro?*
2. *What political gains would the Euro bring Europe?*
3. *And why did Germany finally accept the Euro as the political precondition of France's consent for the German re-unification?*

First and second, the Euro was intended to be the symbol of post-war European unity, a strong currency (enabling the Euro to become a serious alternative/competitor for the US-dollar as the international reserve currency) and the European tool for global power and influence. Third, Germany finally accepted the Euro because in the framework of the Maastricht Treaty the Euro was designed to become a strong currency (just like the former D-mark). And the ECB was designed as a politically independent central bank (just like the Bundesbank in Germany, in the D-mark area), with the monetary-economic policy of sustainable price stability. And Germany also insisted on the no-bail-out clauses.

Germany hoped that the economies of the peripheral countries could and would develop themselves into 'German-type' economies and the Euro zone into an economically strong and convergent global region, so the ECB could remain 'German-type' as well. Unfortunately all that did not happen. And since 2010 Germany allowed itself to be dragged into all sort of European rescue arrangements, abandoning the 'German' no-bail-out clauses of the EU Treaty.

As the result, the German, Dutch, Finnish and Austrian taxpayers have to keep the peripheral Euro countries alive, probably permanently. This is obviously NOT sustainable/acceptable for German, Dutch, Finnish and Austrian taxpayers.

And Germany is outvoted in the ECB board time after time. This is obviously NOT sustainable/acceptable for Germany and its Bundesbank. Therefore Germany probably will abandon the present Euro Pact, as soon as politically possible.

There are rumours that Germany and the stronger European countries are likely to enter into a new currency union which CAN fulfil the abovementioned goals (thus without the other Peripheral countries …and therefore also without France).

Perhaps this new Northern European currency will then first exist for some time as a parallel currency alongside the Euro (the 'GuldenMark' model by Markus C. Kerber), only as a polite gesture to France. A little later the new currency block probably will abandon the Euro completely.

We have to understand that without Germany the Euro is finished. And in the end Germany will only accept a currency that can and will fulfil the abovementioned goals. But we have to understand as well that a European division (in North and South) is a big threat to the existence of the EU internal market, which is in fact the most important political and economical achievement in post-war Europe.

Interestingly the TMS model, which is economical effective and legally easy-to-implement, also fulfils the abovementioned German goals and therefore would be acceptable for Germany. Additionally, the TMS model keeps the European project alive and averts any threat to the existence of the internal market, for which reason Germany and France (and all other Euro countries) would embrace TMS.

Moreover, with the TMS model France also gets its last chance to reform…..so they can cling to political power and influence, on which France is always so keen on. …. ……And with the monetary-economic flexibility of TMS model even the UK could join (remember that the UK rejected Euro participation mainly for the lack of 'flexibility' of the one-size-fits-all Euro Pact).

Last but not least, TMS also perfectly fits the *'E Puribus Unum'* (Out-of-Many-One) principle on which the Euro is based, and as well the *'In Varietate Concordia'* (United-in-Diversity) principle on which the *'European Union (EU)'* has been founded.

The endless applications of the TMS formula

Q. Does the TMS formula have other application possibilities?

Yes. Interestingly, the TMS formula of separating the currency-unit (unit-of-account) function of money from the means-of-payment (including legal tender) function of money, can also be used for a swift, smooth, legal and successful implementation of ALL OTHER proposed strategies to tackle the Euro (zone) crisis by means of monetary devaluations, such as:

- *Euro Holiday model* --- A temporary Euro exit for Greece and other weaker Euro countries with a temporary introduction of a national currency (for instance presented by *prof. Hans-Werner Sinn* and by *prof. Martin Feldstein*),
- *Geuro model* --- Introduction of a new national currency for Greece and other weaker Euro countries parallel to the Euro, temporarily or permanently (*dr. Thomas Mayer*),
- *GuldenMark model* --- Introduction of a new currency for the Northern Euro countries parallel to the Euro (presented by *prof. Markus C. Kerber*, supported by former EU-commissioner *Frits Bolkestein* among others),
- *Euro Division model* --- Division of the Euro (zone) in a Northern and Southern currency area (for instance supported by *prof. Hans-Olaf Henkel* and analyzed by *prof. Johan Graafland* for the Dutch political party '*Christen Unie*'),
- *The Euro parallel currency model* --- Re-introduction of *all* former national currencies and turning the Euro into a European parallel currency (presented by *prof. Roland Vaubel* and supported by former German Finance minister Oskar Lafonatine),
- *Back to National currencies* --- Abandoning the Euro and re-introduction of the former National currencies (for instance presented by the Dutch political party '*Partij voor de Vrijheid*').

In all these strategies new national or European-regional currencies are suggested. Some parallel to the Euro, some not. And some temporarily, some permanent. In these proposals these new currencies all have both functions of money: the means-of-payment (including legal tender) function *and* the currency-unit (unit-of-account) function.

Unfortunately, for of all these strategies the main problem (hindrance) is that an adaption of the EU Treaty is required. The EU Treaty dictates that ONLY the Euro can be legal tender in all Euro countries.

And note that a Treaty change will take a very long time, time Europe does not have anymore.

And here the TMS formula comes in. Implementation of the TMS principle does NOT require a Treaty change. So the TMS formula [separating the currency-unit (unit-of-account) of money from the means-of-payment (including legal tender) function of money] is THE MISSING LINK in all these strategies.

The TMS formula would facilitate the application of all of the above mentioned strategies with the necessary (legal) 'final touch', …….either for instant implementation ……or for the establishment of a transition stage, during which the necessary EU Treaty change can be accomplished.

This means, one way or another, that The Matheo Solution (TMS) presents the ONLY way out of the Euro crisis!

Final

Q. Is it all that simple?

When all the work is finished, yes. With a sense for *realism*, a touch of *common sense*, the ability of *creative thinking*, a serious bit of *hard work* and *a little help from some friends*, it turns out to be that *simple* !

The Matheo Solution (TMS) – Made in Holland for Europe !