

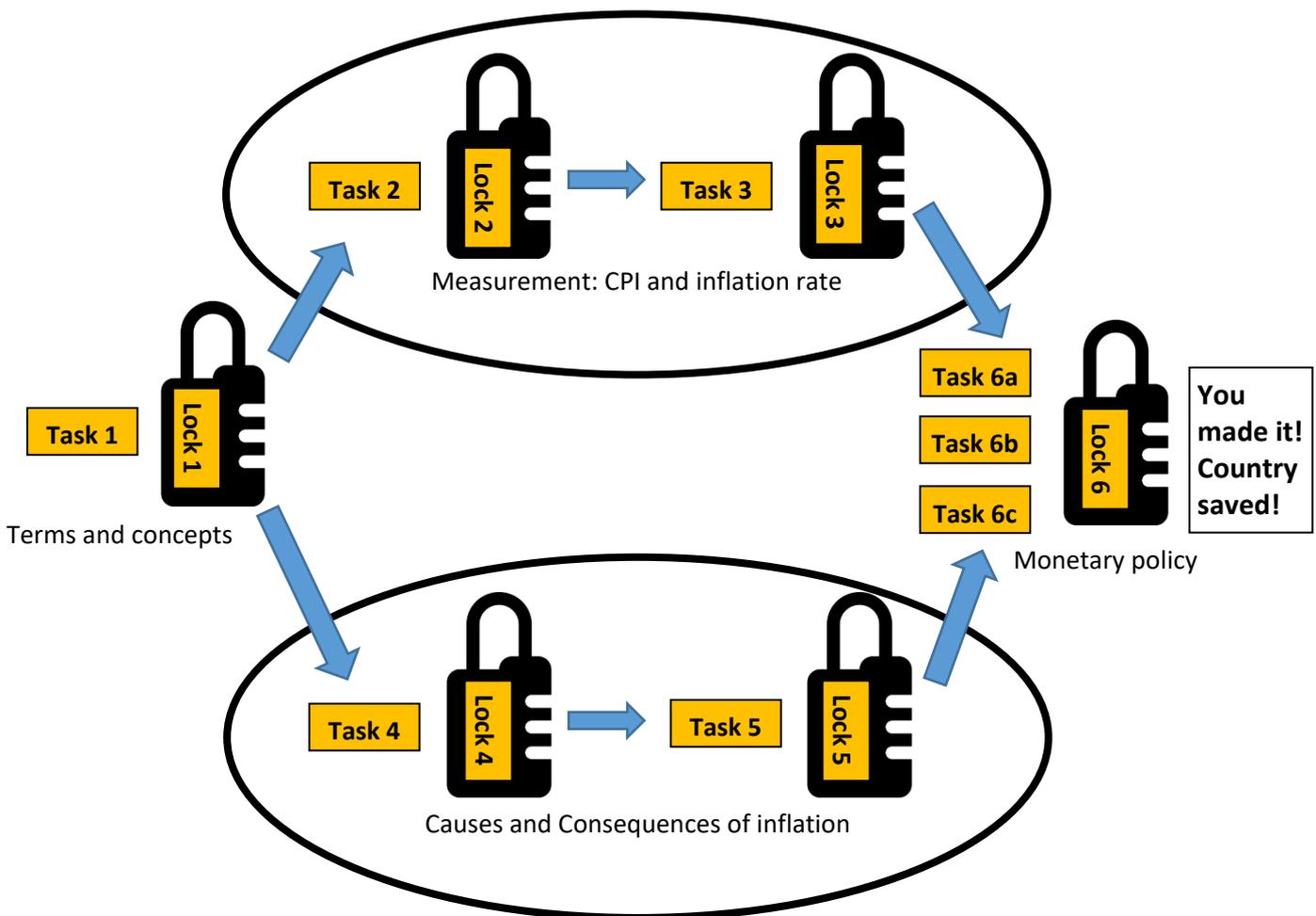
**"Escape Inflation!" - The Situation**

Your country is in a mess: high inflation for several years now. The Central Bank governors have fled the country. Your group has been put in charge for monetary policy. You must find a way for your country to escape inflation. You have 60 minutes before the financial system will break down and a panic will evolve. However, if during these 60 minutes you manage to find the right monetary policy tool, and are able to solve the questions on the way, you can save your country from the brim.

The various tasks will help you find the number codes necessary to open a total of six locks on the way to the official monetary policy toolbox. An opened lock will give you access to the next task. However, be aware that any lock will only allow three opening attempts! If you fail to enter the right code for the third time, you have lost it.

Keep cool, use your economics, and cooperate – then you can make it!

Good luck!!







**2\_CPI CALCULATION  
(receipts to cut)**

2017 edition:  
~~12.000 ₺~~  
**Fast & Light**  
 Only!!!



Brand new in 2018  
~~15.000 ₺~~  
**Super Car**  
 Only 15.000 ₺



Offer valid until 31-12-2018

Receipt 06-06-2017

<b>CAR FUEL 35 litres</b>	<b>35,00 ₺</b>
(price per litre: 1,00 ₺)	
VAT (25%) included:	7,00 ₺
Net price	28,00 ₺

✂

Receipt 08-06-2018

<b>CAR FUEL 35 litres</b>	<b>52,50 ₺</b>
(price per litre: 1,50 ₺)	
VAT (25%) included:	10,50 ₺
Net price	42,00 ₺

✂

Receipt 14-06-2019

<b>CAR FUEL 35 litres</b>	<b>77,00 ₺</b>
(price per litre: 2,20 ₺)	
VAT (25%) included:	15,40 ₺
Net price	61,60 ₺

August 5, 2018:  
 A bread loaf is still the same as last year, 2 ₺.

Jan. 13, 2019:  
 New year - new prices... Bread is 3 ₺ per loaf now.

✂

Jan. 2018:  
 Darn, they increased ticket prices by 50%!! Now jazz concerts are 15 ₺.

Jan. 2019:  
 Yeah, concert prices are down by 20% compared to last year!

**The White Temptation**  
 2019



**21.000 ₺ all incl.**

Offer ends 31-12-2019

**"Escape Inflation!" – Task 2 – Find the Consumer Price Index**

**Background:**

The main news media is claiming that you are not qualified, and they demand that you prove your understanding by calculating the inflation rate (Task 3), based on a consumer price index (this task). The former central bank governors weren't able to do it properly...

You know your economics, so you first want to determine the Consumer Price Index (CPI) for the three following years: 2017, 2018 and 2019, using 2017 as the base year. You will find some hints in the "notebook of a representative household" which might help you.

**Task:**

Check out the enclosed "notebook of a representative household" and the receipts, advertisements and little notes.. From this, you figure out that there are only four goods/services traded in your economy: cars, car fuel, jazz concerts and bread. Now, taking the title of the notebook literally, and making systematic use of the information provided there, while **being aware of some potential pitfalls**, you should be able to calculate the CPI for 2017, 2018 and 2019, respectively. These are needed to identify the three digits needed to open lock #2.

Year	CPI value (rounded)	Solution clue:
2017	<input type="text"/>	Use first digit of this CPI value
2018	<input type="text"/>	Use second digit of this CPI value
2019	<input type="text"/>	Use third digit of this CPI value

Solution (three-digit code to open lock #2):

<input type="text"/>	<input type="text"/>	<input type="text"/>
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**2\_CPI CALCULATION  
(task)**

From the "notebook of a representative household"...

	<b>What we purchased (2017)</b>	<b>What we purchased (2018)</b>	<b>What we purchased (2019)</b>
Car	1 every 5 years	1 every 7 years	(as in 2018...)
Car fuel	25 litres per month	20 litres per month	
Jazz concerts	2 per month	2 per month	
Bread	15 loafs per month	16 loafs per month	

<b>3_INFLATION RATE (task)</b>
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**Escape Inflation – Task 3 – Find the Inflation rate**

**Task:**

Using the *rounded* CPI figures from task 2, calculate the inflation rate (price level of 2019 compared to 2018), rounded to one decimal place. This will help you to open lock #3 which – together with lock #5 – is needed to access the final set of tasks #6.

Solution (three digits):

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**"Escape Inflation!" – Task 4 – Causes of Inflation**

**Background:**

When there's inflation, it can be useful to know what the causes are. Often, it is a variety of causes at the same time. Clearly, in your country's case, one problem has been incompetent central bankers not knowing their economics, and applying wrong policies in the past. But what other determinants are potentially at play? This is something you would like to explain to the public, for them to understand that you are taking various factors into account. A former central bank intern has compiled a list of recent changes in the economy, and you would like to use it. But are all of these plausible explanations for inflation?

**Task:**

Read the enclosed list of six recent changes in the economy. Determine which of these are *plausible factors to cause inflation*. If in doubt, use AD-AS diagrams to check.

Using the arrow clues, you will find one digit in the solution grid at the bottom of the list.

Use the following additional clue to come up with a three-digit solution needed for lock #4:

Additional clue: Extract the root and "multiply" it by itself => then you'll get a real "three-digit solution"! This will open lock #4.

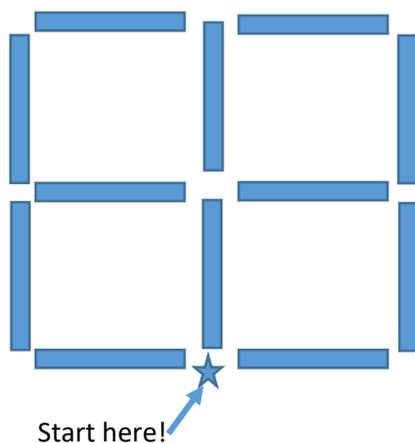
Solution (one digit):

Final solution (three digits):

<input type="text"/>	<input type="text"/>	<input type="text"/>
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**4\_CAUSES  
(task)**

(This order is important)	Recent changes, and possible causes for rising price levels – use AD-AS diagrams to find if these are plausible causes!	If it is a plausible cause for a rising price level, then follow this arrow...	If it is not a plausible cause (but rather the opposite), then follow this arrow...
1	Our country's exchange rate appreciated (= gained in value)		
2	The oil price has risen. (And our country doesn't have oil.)		
3	The government has abolished the minimum wage.		
4	Consumer and investor confidence have risen.		
5	There's a global economic upswing, and demand for our exports have increased.		
6	The government has increased income taxes considerably.		



**"Escape Inflation!" – Task 5 – who is affected and how?**

**Background:**

The inflation in your country is affecting many people quite significantly. Some households have approached the central bank to complain how much they are harmed by the high inflation rate from 2018 to 2019 – either because of what they consume, or because of what their incomes are. But not everybody is affected in the same way, for some households the situation is worse than for others.

Also, the new interim finance minister (who seems to be struggling with his economics) has approached you. He wants to understand how the inflation affects his government budget and needs your expertise.

**Task:**

Read the three enclosed documents: On the left hand side you will find the households' or the finance minister's descriptions of their situation, respectively. On the right hand side, you will find general descriptions of how households or the government budget may be affected by the inflation in your country. Your task then is for each statement on the left hand side to find the corresponding general description on the right. On each of the three sheets, the correct matching will lead to one digit being "hit". The overall solution for this task consists of these three digits.

The solution is needed as one of the access codes to task #6.

***Hint: You need to refer to information from task 2 and 3 to solve this correctly!***

Final solution (three digits):

Sheet 1	Sheet 2	Sheet 3

**"Escape Inflation!" – Task 5 – Who is affected and how? – Sheet 1: Consumers**

For each household's statement, find the general statement which best corresponds to it.

**Note:** not every general statement may be matched, and a general statement may be matched by more than one household statement!

To do this correctly, you need to *refer to information from task 2 and 3.*

Household's statement		General statement
"I don't have a car and never plan to buy one!"	4   8	The official CPI will <i>overestimate</i> the inflation rate experienced by some households.
"I love Jazz and go to <i>every</i> concert that's on!"	6	The official CPI will <i>underestimate</i> the inflation rate experienced by some households.
"I live on a low income and consume exactly <i>half</i> of each of the amounts in the basket of a representative household!"	5	The official CPI will represent the inflation rate experienced by some households pretty well.

When you're done and have matched everything correctly, **one** of the number circles will be "**hit**" => this is the first digit you need for lock #5.

**Escape Inflation – Task 5 – who is affected and how? – Sheet 2: Income earners**

For each household's statement, find the general statement which best corresponds to it.

Note: not every general statement may be matched, and a general statement may be matched by more than one household statement!

To do this correctly, you need to refer to information from task 3.

Household's statement		General statement
"I receive transfer payments – my only source of income. They're adjusted to inflation every 5 years!"	4	Given the rate of inflation, the real income of some households might rise.
"I have invested some financial capital, the annual interest rate I get is 50 %!"	7 6	Given the rate of inflation, the real income of some households will fall, at least temporarily.
"My employer increases the nominal wage rate every year (by 1.5%), so my income is continuously rising!"	2	Given the rate of inflation, the real income of some households will roughly stay the same.

When you're done and have matched everything correctly, **one** of the number circles will be "hit"  
=> this is the second digit you need for lock #5.

**Escape Inflation – Task 5 – who is affected and how? – Sheet 3: Finance minister**

For each household's statement, find the general statement which best corresponds to it.

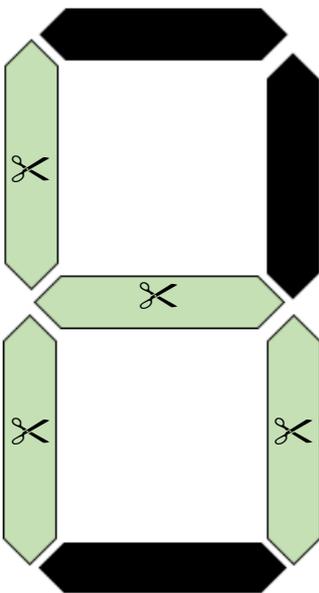
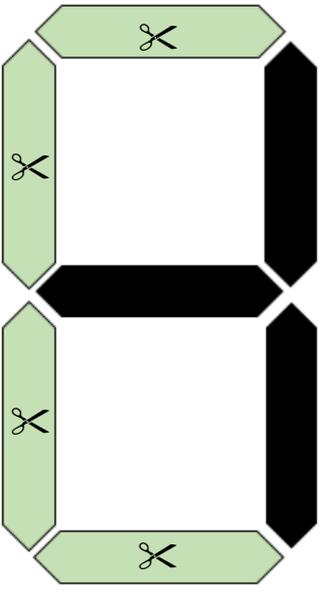
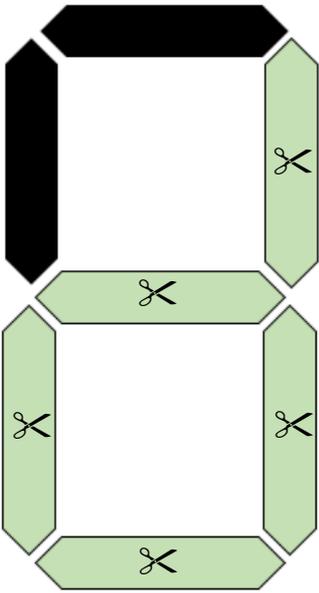
Note: not every general statement may be matched, and a general statement may be matched by more than one finance minister statement!

To do this correctly, you need to refer to information from task 2.

Finance minister's statement		General statement
"Our public budget is mainly financed by value added tax (VAT) revenue. And the VAT rate will be kept constant!"	1	Ceteris paribus, with inflation, some parts of government revenue may be rising.
"The government is highly indebted, owing to international lenders, but <b>in the national currency</b> <del>€</del> . The interest rate (in <del>€</del> ) we have to pay annually has always been, and still is, 4%. There's no plan to change the debt level!"	9	Ceteris paribus, despite inflation, some parts of government revenue will be more or less unchanged.
"The government is paying all its civil servants (teachers, police force, public administration,...) their regular salary. Public salaries are not inflation adjusted!"	5	Ceteris paribus, some parts of government expenditure will be unchanged, despite inflation.
	7	Ceteris paribus, with inflation, some parts of government expenditure will fall.

When you're done and have matched everything correctly, **one** of the number circles will be "hit"  
=> this is the third digit you need for lock #5.



<p>The Central Bank can't or shouldn't increase the key interest rate.</p> 		<p>The Central Bank can and should increase the key interest rate.</p> 
<p>The Central Bank can and should increase the money supply.</p> 		<p>The Central Bank can't or shouldn't increase the money supply.</p> 
<p>The Central Bank can't or shouldn't reduce government spending.</p> 		<p>The Central Bank can and should reduce government spending.</p> 

Print this on thicker paper, and cut out the three cards. Then, cut out the green parts of the digits.

## 6\_MONETARY POLICY (cards to cut I)

**"Escape Inflation!" – Task 6 – Monetary Policy – Part 1: Which policy instrument(s)?**

**Background:**

Now, you are finally getting to decide on the monetary policy instrument(s) to save your country from a further escalation of inflation. A Central Bank typically has certain instruments at its disposal which it can/should use to conduct contractionary monetary policy. The previous Central Bank governors discussed three proposals what they should do to fight the inflation.

**Task:**

Read the proposals and decide which of these (it could be none of them up to all three) make sense – i.e. a Central Bank can and should pursue it/them in times of inflation. Then, rotate each card accordingly, so that the "thumb" shows in the right direction (to signal an approval or turning down of the proposal). Finally, combine the cards in some way to come up with **one** digit.

Solution (one digit):

This is the **first** digit of the final lock, lock #6.

**"Escape Inflation!" – Task 6 – Monetary Policy – Part 2: Transmission**

**Background:**

Once you have decided on your monetary policy move(s) with the aim of reducing inflation, you would expect certain effects to show in the macro economy. According to basic macroeconomic theory, a chain of cause-and-effect-relationships (a process known as "transmission") is likely to happen. The former governors had collected some bits and pieces of "what might happen", they are given on the enclosed sheet of paper.

**Task:**

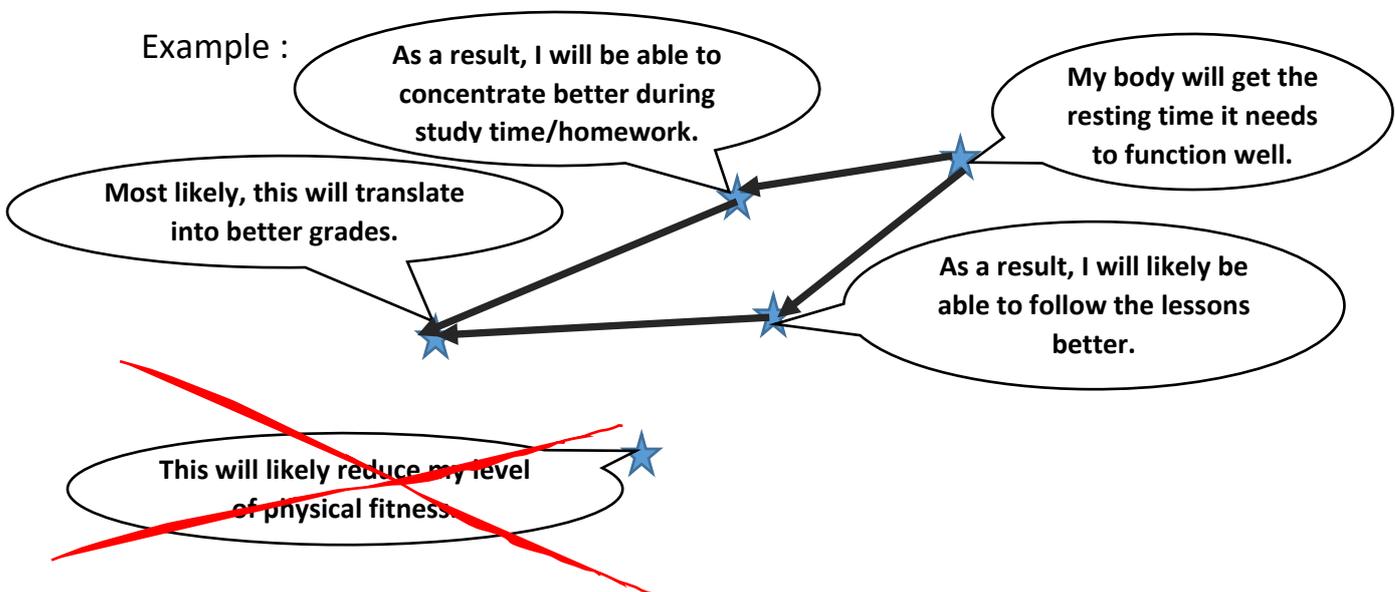
Read the "what might happen" statements, and for each of them think carefully...

... whether they have a part in the chain of causes and effects as a result of contractionary monetary policy (or not).

... what the proper **order** of causes and effects is.

First, cross out the ones that have nothing to do with it. Then, for any direct causal relationship, draw an arrow between the cause and the effect, using the little stars marked for each statement. Note that a cause might have *more than one direct effect*, and that an effect might be caused by *more than one cause*.

Example :



When you have solved this task correctly, **one digit** should magically appear.

Solution (one digit):

This is the **second** digit of the final lock, lock #6.

*"Escape Inflation!"*

*Educational Escape Room in Economics*

**6\_MONETARY POLICY  
(task sheet)**

Consequently, at the original price level,  $SRAS > AD$ .

This will lead to a decrease in short run aggregate supply SRAS.

As a likely result, aggregate demand will fall.

Firms will tend to reduce investments.

Consumers will tend to reduce consumption spending.

As a result, the price level should drop until macroeconomic equilibrium is restored.

As a result, the deflationary gap will eventually be closed.

This will likely lead to a decrease in net exports.

Economic actors will face higher interest rates for borrowing and saving.

*"Escape Inflation!"*

*Educational Escape Room in Economics*

**6\_MONETARY POLICY  
(paper scraps to cut III)**



<b>RATCHET</b> <b>2</b>	<b>LAG</b> <b>4</b>	<b>TIME</b> <b>+</b>
<b>CROWDING</b> <b>-</b>	<b>CETERIS</b> <b>:</b>	<b>OUT</b> <b>6</b>
<b>PARIBUS</b> <b>3</b>	<b>EFFECT</b> <b>0</b>	

**Background:**

Sometimes, monetary policy doesn't quite seem to work as suggested by economic theory. If this happens, and your efforts don't show result quickly – i.e. the price level, or at least the rate of inflation, doesn't go down – this may be explained by several factors. Even though you are confident, that your policy action will bring the desired outcome, you still want to be aware, just in case.

The former Central Bank governors seemed to be aware of this: In the wastepaper basket, some scraps of paper have been found, which indicate that the governors have thought about possible failures of macroeconomic policies. Taking a closer look at these paper scraps will give you a clue to solve this final task.

**Task:**

- 1) Read the enclosed paper scraps with explanations of potential policy failures.
- 2) For each of these explanations, find the matching economic term (from the paper scraps).
- 3) Identify which of the explanations are valid to account for a *potential failure of contractionary monetary policy* that you will be using, and which of them aren't valid => **discard the invalid ones.**
- 4) Solve the calculation that is indicated by all the matching terms paper scraps of the *valid* explanations, in the given order.

When you have solved this task correctly, you will have found **one digit**.

Solution (one digit):

This is the **third** digit of the final lock, lock #6.

**6\_ MONETARY POLICY  
(task sheet III)**

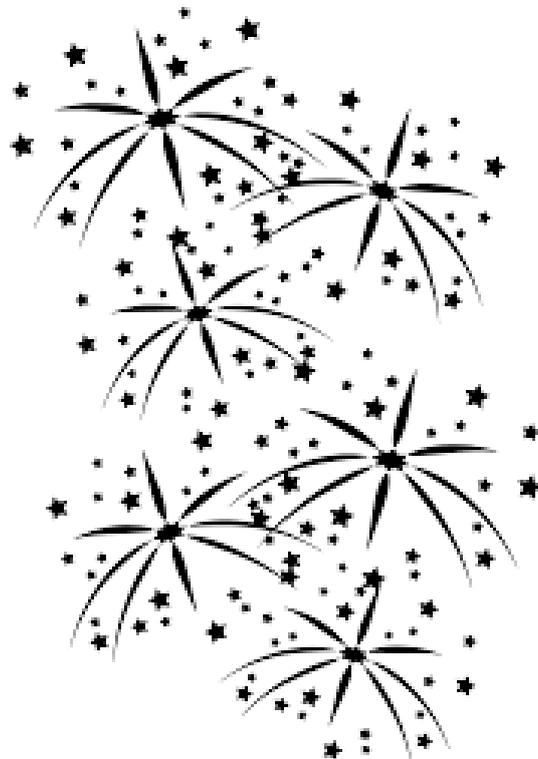
Explanation	Economic Term	<b>Calculation</b> (only if applicable! i.e. only if the phenomenon could be a reason for contractionary monetary policy to fail)
Prices may not adjust downwards, no matter how much they have been inflated beforehand. This might mean that the price level will not fall, even if contractionary monetary policy leads to the slowdown of inflation.		
Even if a central bank might take decisions quickly and act faster than governments in the case of fiscal policy, still the actual transmission process until actors adjust their behaviour in response to interest rate changes, might not take place immediately. Hence the desired impact may not be observed instantly.		
When government spending is increased, and this is financed by borrowing, then interest rates might rise. This could discourage private firms to invest.		
The Central Bank may not be the only actor to change their policy and induce changes in people's and firms' action. If, for example, at the same time fiscal policy or supply side policy is conducted, the fundamental assumption for causal relationships in economics is violated.		

Solution:

**Well done, everyone!**

Thanks to your economic insights and your cooperation, you have saved the country – now the economy can start to prosper again!

And who knows – perhaps they will ask you for your help with economic policy again sometime in the future. 😊



# JOKER 😊

*Use this Joker to Get  
Help with Any ONE Digit  
of Any one of the  
padLocks*