## Introduction to Macroeconomics $\cdot\,$ M4 $\cdot\,$ 4 April 2019 $\cdot\,$ Exam time: 70 minutes

DNI Number	1st Surname	Name
<b>1.</b> [2%] What is a financial asset?		<b>6.</b> [8%] Explain how the money multiplier process would be affected if the younger people only accepted bank loans that take the form of a deposit and not the form of cash.
<b>2.</b> [3%] Explain whether all faggregates and whether all mon assets.	financial assets are monetary letary aggregates are financial	
<b>3.</b> [4%] In the money creation m between <b>M1</b> and the liquidity ratio	nodel, is there any relationship ? If so, describe it.	<b>7.</b> [7%] If the liquidity ratio increases by 100% and the reserve ratio is reduced by 50%, does the money multiplier rise or fall? Justify your answer.
<b>4.</b> [4%] Does a rise in <b>M1</b> cause a cause a rise in <b>M1</b> ? Explain your a	rise in <b>M0</b> or does a rise in <b>M0</b> nswer.	
		<b>8.</b> [3%] Two financial assets differ only in their risk and liquidity. Why the riskier asset should be expected to be the more liquid?
<b>5.</b> [7%] Find, if possible, the mone reserves and cash in the hands of Find also the liquidity ratio (if not possible).	the public is equal to reserves.	
		<b>9.</b> [2.5%] What is an expansionary open market operation?
		<b>10.</b> [8%] Explain the effect of a contractionary open market operation on the exchange rate.

<ul> <li>11. [3%] Indicate something that the lending facility and the deposit facility have in common and something that differentiates them.</li> <li>12. [4%] Explain what role the banks' reserves at the central bank play in the interbank payment system.</li> </ul>	<b>17.</b> [10%] Explain, and analyze graphically by means of the currency market model, the effect on the equilibrium exchange rate \$/€ of having American consumers stop purchasing Spanish commodities and spending the same money instead in French commodities. What if they spent the money in British commodities?
<b>13.</b> [3%] What is the interest rate corridor?	<b>18.</b> [10%] Find the equilibrium exchange rate and the trade balance if the supply of euros function for trade purposes is $q_{\ell}^{s,t} = 2 \cdot e$ , the supply of euros function for financial purposes is $q_{\ell}^{s,f} = 2 + 4 \cdot e$ , the trading demand for euros function is $q_{\ell}^{d,t} = 20 - e$ and the financial demand for euros function is $q_{\ell}^{d,f} = 20 - 2 \cdot e$ .
<b>14.</b> [3%] Indicate something that the real exchange rate and the nominal exchange rate have in common and something that differentiates them.	
<b>15.</b> [3%] Indicate something that the nominal exchange rate and the nominal interest rate have in common and something that differentiates them.	
16. [4%] Explain whether the euro appreciates or depreciates against the dollar if the exchange rate goes from 4 \$/€ to 1/4 €/\$.	<b>19.</b> [4%] Ascertain wheteher the real exchange rate increases or decreases if the nominal exchange rate remains constant, the domestic price level rises and the foreign price level falls.

<b>20.</b> [3%] If there is any difference between a real appreciation and a nominal appreciation, explain what the difference is.	<b>26.</b> [4%] In the AS-AD model, explain what shifts in the functions would create stagflation.
<b>21.</b> [4%] Explain whether a fall in the real exchange rate represents an improvement or an erosion of competitiveness.	<b>27.</b> [3%] If the GDP deflator falls, does the CPI increase or decrease? Justify your answer.
<b>22.</b> [4%] Find the purchasing power parity exchange rate if the real exchange is 2 and the nominal exchange rate is 6 (always write down first any formula or equation you use).	<b>28.</b> [3%] Does a rise in real GDP necessarily cause a reduction in the GDP deflator? Explain your answer.
<b>23.</b> [4%] What currency must the Federal Reserve buy, and what sell, in the currency market if there is a fixed exchange rate equal to 2 \$/€ and the market equilibrium exchange rate is 1/4 €/\$? Why?	<b>29.</b> [3%] State a similarity, and a difference, between the money multiplier process and the expenditure multiplier process.
<b>24.</b> [2.5%] What does the open economy trilemma assert?	<b>30.</b> [2.5%] Define the concept of macroeconomic equilibrium.
<b>25.</b> [4%] What is, if any, the difference between inflation and reflation?	<b>31.</b> [4%] What event could explain a rise in the inflation rate and a fall in GDP? What event could not?

**32.** [13%] (04/10/18) "On 27 October 2017, Catalonia's former president Carles Puigdemont unilaterally declared independence from Spain, sparking the country's worst constitutional crisis since 1975 (...) Catalonia (...) has the highest GDP of any of Spain's regions, with an economy about the size of Denmark's (...) In 2017, its exports were worth €71bn (£63bn), more than a quarter of the national total, with cars, food products, and chemicals just some of the products shipped elsewhere. But what would happen to all of this output if the region broke away? Angel Talavera, lead eurozone economist at forecaster Oxford Economics, says the transition to independence would be 'relatively painless' if it followed a legally-binding referendum. But the Catalan economist, who is against independence, says this would be 'extremely unlikely to happen', with the region much more likely to secede unilaterally, 'causing chaos'. Mr Talavera also believes foreign investment would fall and, as we saw before last October's poll, businesses would begin to relocate their headquarters for legal reasons. 'With the central government providing a lot of liquidity to the region, Madrid could also shut down Catalonia's credit line. It might also block re-entry to the EU,' he adds. 'I think we would see Catalonia tumble into recession within two quarters'." <u>https://www.bbc.com/news/business-45723474</u>

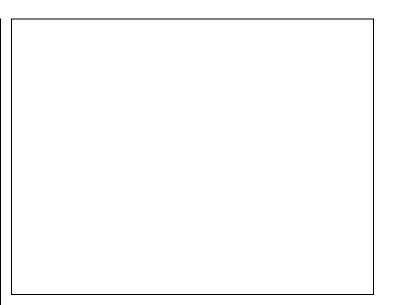
Why would unilateral independence cause economic chaos in Catalonia and reduce foreign investment?

**33.** [15%] (12/02/18) "The Financial Times group recognises Catalonia as the best Southern European region for investment for 2018 and 2019. The Financial Times fDi Magazine calculates this based on five criteria: economic potential, labour environment, cost effectiveness, infrastructure and business friendliness. It also rates Catalonia as having the best investment attraction strategy amongst the regions in Europe qualified as large."http://catalonia.com/newsletter news/news/2018/financial-times-recognises-catalonia.jsp

Use a graphical representation of:

(i) the AS-DA model (justifying any shift in the AS or DA functions) to ascertain the likely effect on the macroeconomic equilibrium of recognizing an economy to be the best prospect for investment;

(ii) the currency market model to establish whether the domestic currency appreciates and depreciates as a result of the recognition.



**34.** [15%] (21/02/19) "<u>Catalan exports grow by 1.1% in 2018</u> and set a new record for the eighth consecutive year. Catalan sales abroad reached 71,623.8 million euros. 2018 also registered, with 17,239 companies, the highest rate on record of regular exporting companies, i.e., companies that have been selling abroad for the last four years in a row. Catalan exports represent 25.1% of Spain's total." <u>http://catalonia.com/newsletter\_news/news/2019</u> /<u>Exports\_Catalonia\_2018.jsp</u>

Use a graphical representation of:

(i) the AS-DA model (justifying any shift in the AS or DA functions) to ascertain the likely effect on the macroeconomic equilibrium of a rise in exports;

(ii) the currency market model to establish whether the domestic currency appreciates and depreciates as a result of exports growth.

**35.** [18%] (01/04/19) "The Reserve Bank of India (RBI) said on Monday it would conduct another round of <u>dollar-rupee buy-sell</u> <u>swap</u> of \$5 billion for a tenure of three years on April 23, its second such auction within a month. <u>The new swap auction tool is</u> <u>meant to provide the central bank greater flexibility in managing</u> <u>banking system cash, while helping soak up any potential large</u> <u>dollar inflows that could make the rupee rise sharply</u>. This comes shortly after the RBI said last month it will conduct a dollar-rupee buy-sell swap auction of \$5 billion for a tenure of three years on March 26, the first such market sale by the central bank to mop up dollars and pump in rupees."

https://economictimes.indiatimes.com/markets/forex/rbi-to-hold-second-round-of-dollar-rupee-swap-auction/articleshow/68673266.cms

"Dollar swap is based on two essential premises. Firstly, the dollar infuses rupee liquidity into the system and thus plays the same role as the open market operations. At the same time, it also enhances the dollar reserves of the RBI and indirectly supports exporters by capping the appreciation of the rupee (...) Exporters benefit as the rupee appreciation is capped by dollar demand from RBI." https://www.financialexpress.com/market/cafeinvest/rbis-dollar-rupee-swap-why-its-critical-for-indias-forex-reserves/1536521/

Explain why a dollar-rupee buy-sell swap: (i) prevents the appreciation of the rupee; and (ii) injects liquidity in the Indian economy like an expansionary open market operation.

"Companies doing business abroad often use currency swaps to get more favorable loan rates in the local currency than they could if they borrowed money from a bank in that country (...)

## How a Currency Swap Works

In a currency swap, the parties agree in advance whether or not they will exchange the principal amounts of the two currencies at the beginning of the transaction. The two principal amounts create an implied exchange rate. For example, if a swap involves exchanging  $\notin$ 10 million versus \$12.5 million, that creates an implied EUR/USD exchange rate of 1.25. At maturity, the same two principal amounts must be exchanged, which creates exchange rate risk as the market may have moved far from 1.25 in the intervening years."

https://www.investopedia.com/terms/c/currencyswap.asp

**36.** [17%] (03/04/19) "Bad news for farmers: Monsoon to be below normal this year (...) All may not be well this year for the Indian economy, which <u>heavily depends on monsoon rains with</u> majority of its population dependent on agriculture for livelihood. There is a 55 percent likelihood of below normal monsoon for the year 2019, private weather forecaster Skymet said today. What's

worse, there is also a 15 percent probability of drought, Skymet Weather said (...) Monsoon rainfall is likely to remain 'below normal' for the four-month period from June to September." <u>https://www.financialexpress.com/economy/bad-news-for-farmers-monsoon-to-be-below-normal-this-year-issues-with-kharif-sowing-likely/1536835/</u>

Use a graphical representation of the AS-DA model to find the likely effect on the macroeconomic equilibrium of a drought (less than average rain falls). What is the likely effect of the drought on the exchange rate?

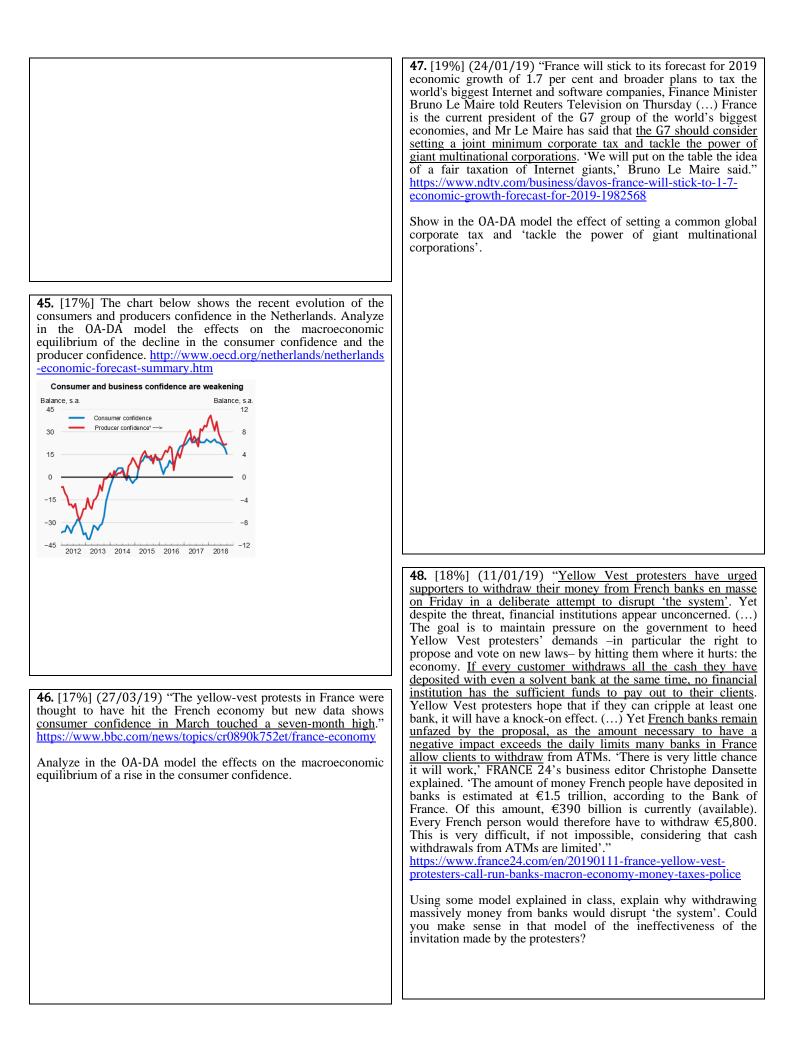
**37.** [18%] "China's GDP growth pace was inflated for nine years, study finds. The revision clearly indicates that the slowdown in Chinese growth since 2008 is severe. China over-reported its economic growth between 2008 and 2016 by an average of 1.7 percentage points, according to a recent study by researchers at the Chinese University of Hong Kong and the University of Chicago. The discrepancy came from local governments who are rewarded for meeting growth and investment targets."

https://economictimes.indiatimes.com/news/international/business/chinas-gdp-growth-pace-was-inflated-for-nine-years-study-finds/articleshow/68330636.cms

Explain the impact, if any, on the macroeconomic equilibrium of reporting GDP values that are larger than the real values. What if the reported values were smaller than the real values?

<b>38.</b> [16%] Explain, and analyze graphically by means of the liquidity market model, the effect on the equilibrium interest rate of people believing that GDP is larger than the true GDP.	<ul> <li>40. [20%] (03/04/19) "Indian companies squeezed as inflation falls but interest rates remain high. Indian businesses are getting squeezed. As economic growth slows and inflation sinks they have little ability to raise prices without losing sales, and yet they are getting almost no relief from borrowing costs with lending rates remaining high. The result: profit margins get crushed. And that helps to explain why companies are not confident enough to significantly boost capital spending or hire at a robust pace." https://in.reuters.com/article/us-india-economy-rates-analysis/indian-companies-squeezed-as-inflation-falls-but-interest-rates-remain-high-idINKCN1RF15V</li> <li>(i) Explain why a fall in the inflation rate with high interest rates are negative for businesses.</li> <li>(ii) Use the AS-AD model to find the effect on the macroeconomic equilibrium of a fall in the profit margins of firms.</li> </ul>
<ul> <li>39. [20%] (03/04/19) "The six-member Monetary Policy Committee (MPC) of the Reserve Bank of India (RBI) is likely to <u>cut short-term policy rate by 25 basis points</u> in its first bimonthly review of FY20 on Thursday. Analysts believe easing inflation may give RBI room to address growth concerns of the economy. <u>High-frequency macro data such as car sales</u>, PMI and IIP numbers have been hinting at a slowdown in economic activity. After recording a high single-digit growth of 7.3 per cent in July 2018, the core sector has consistently recorded low single-digit growth. Moreover, several core sector industries have been showing wide variations in growth of late () <u>El Nino conditions do not bode very well for India</u>, which relies quite a bit on rains for its agriculture sector." <u>https://economictimes.indiatimes.com/markets/stocks/news/rbimay-cut-rate-soften-policy-stance-revise-gdp-forecast-4-things-towatch-in-money-policy/articleshow/68703296.cms</u></li> <li>(i) Is cutting the interest rate policy rate an expansionary or a contractionary monetary policy? Justify your answer.</li> <li>(ii) Explain why bad weather conditions and a slowdown in economy activity could justify lowering the interest rate.</li> </ul>	
	41. [24%] (05/03/2019) "After years of growth of over 2%, the Dutch economy will grow 1.5% this year and in 2020, the government's macro-economic think-tank CPB said on Tuesday. The downturn in growth is due to international uncertainties such as Brexit, Chinese economic developments and US trade policy. 'International trade is increasing at a slower rate, which is reflected by Dutch exports that are projected to grow substantially less rapidly in 2019 and 2020,' the CPB said. 'International uncertainties, such as US trade policy, Brexit and the state of the Chinese economy, also have a negative impact on the economy.' Spending power will rise by an average 1.6% this year, and 1.3% in 2020, the CPB said, stimulated by government policy and higher wages. The new figure includes higher energy prices and taxes which have boosted energy bills by an average of over €300 a year (…) Inflation will rise to 2.3% this year, because of the increase in value added tax (btw) and energy prices, but fall back again to 1.4% in 2020." Analyze separately, by means of the AS-AD model, the effects on the macroeconomic equilibrium of each of the following events: (i) having more international uncertainties; (ii) the slowdown in the GDP growth of the rest of the world; and (iii) the increase of value added tax; and (iv) the increase of energy prices.

	<ul> <li>43. [18%] (10/12/18) "France's Yellow Vest protests are 'economic catastrophe', finance minister says. French Finance Minister Bruno Le Maire says France's 'Yellow Vest' protest movement will cost the country an estimated 0.1% of GDP growth in the critical year-end quarter, with small and medium businesses particularly hard hit by the unrest." https://www.france24.com/en/20181210-france-yellow-vest-protests-economic-catastrophe-brexit-stockpiling-luxembourg-transport</li> <li>Use some model explained in class to explain why the protest movement is supposed to affect GDP negatively.</li> </ul>
<b>42.</b> [16%] (10/01/19) "The stereotype is true: French people pay a lot of taxes. In fact, according to statistics from the OECD, France tops the podium when it comes to the amount of tax taken in compared to the size of the economy." <u>https://www.france24.com/en/20190110-france-taxes-taxation- economy-yellow-vest-wealth-income-inequality-public-services</u> Consider economies A and B. In A, people pay more taxes than in B. Use the OA-DA model to ascertain in which economy the inflation rate is likely to be higher and in which country GDP is	<b>44.</b> [18%] (30/03/19) "The yellow vest movement for economic justice has appeared to lose support in recent weeks, drawing significantly smaller crowds than at its beginning in November, when hundreds of thousands of people mobilized across France, initially to oppose fuel tax hikes, before expanding into a broader rejection of Macron's economic policies. The French government is expected to announce next month a new batch of measures as a result of a 'great debate' launched by Macron so ordinary French people could express their views on key issues."
likely to be lower.	https://www.france24.com/en/20190330-france-yellow-vests- stage-20th-protest-despite-bans-injuries-police-violence-riots Use some model explained in class to explain why a fuel tax hike may induce people to protest and reject that policy.





"La banque gouverne" = banks rule

49. [24%] (November 2018) "Economic growth is projected to continue at a pace of around 11/2 per cent in 2019 and 2020. Still supportive financing conditions and business tax cuts will boost business investment, despite slowing external demand. Lower labour taxes, a more flexible labour market and improved training opportunities will help job creation, notably for low-skilled workers, supporting household consumption. Core inflation will strengthen, underpinned by the firming of the economy and a pick-up in wages. The fiscal deficit will progressively decline, despite a temporary increase due to a tax credit reform in 2019. Consolidation efforts remain limited, though. A further reduction in non-priority spending is needed to put the public debt-to-GDP ratio, currently close to 100% (Maastricht definition), on a firmly declining path and sustainably finance ongoing tax cuts for businesses and households. In parallel, the government should continue to pursue structural reforms to generate more inclusive and sustainable growth" http://www.oecd.org/economy/franceeconomic-forecast-summary.htm

Analyze in the OA-DA model the effects on the macroeconomic equilibrium of: (i) supportive financing conditions; (ii) business tax cuts; (iii) lower external demand; (iv) lower labour taxes; (v) a declining budget deficit; (vi) structural reforms.

**50. Open question** [?%] Make a comparative analysis of the economic data from Spain, France and the Netherlands.

[5%] Is it by chance that the policy interest rate is the same in Spain, France and the Netherlands?

Sp	ain	Economy	Data
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	2013	2014	2015	2016	2017
Population (million)	46.6	46.5	46.4	46.4	46.3
GDP per capita (EUR)	22,014	22,340	23,271	24,107	25,115
GDP (EUR bn)	1,026	1,038	1,080	1,119	1,164
Economic Growth (GDP, annual variation in %)	-1.7	1.4	3.4	3.3	3.1
Domestic Demand (annual variation in %)	-3.2	1.9	4.0	2.6	2.9
Consumption (annual variation in %)	-3.2	1.5	3.0	2.9	2.4
Investment (annual variation in %)	-3.4	4.7	6.5	3.3	5.0
Exports (G&S, annual variation in %)	4.3	4.3	4.2	4.8	5.0
Imports (G&S, annual variation in %)	-0.5	6.6	5.9	2.7	4.7
Industrial Production (annual variation in %)	-1.6	1.2	3.2	1.9	3.1
Retail Sales (annual variation in %)	-3.9	0.9	4.2	3.9	0.7
Unemployment Rate	26.1	24.4	22.1	19.6	17.2
Fiscal Balance (% of GDP)	-7.0	-6.0	-5.3	-4.5	-3.1
Public Debt (% of GDP)	95.5	100	99.4	99.0	98.3
Inflation Rate (HICP, annual variation in %, eop)	0.3	-1.1	-0.1	1.4	1.2
Inflation Rate (HICP, annual variation in %)	1.5	-0.2	-0.6	-0.3	2.0
Inflation (PPI, annual variation in %)	0.6	-1.3	-2.1	-3.1	4.4
Policy Interest Rate (%)	0.25	0.05	0.05	0.0	0.0
Stock Market (annual variation in %)	21.4	3.7	-7.2	-2.0	7.4
Exchange Rate (vs USD)	1.38	1.21	1.09	1.05	1.20
Exchange Rate (vs USD, aop)	1.33	1.33	1.11	1.11	1.13
Current Account (% of GDP)	1.5	1.1	1.1	1.9	1.9
Current Account Balance (EUR bn)	15.6	11.2	12.2	21.5	22.2
Trade Balance (EUR billion)	-16.0	-24.5	-24.2	-18.8	-24.7

Netherlands Economy Data					
	2013	2014	2015	2016	2017
Population (million)	16.8	16.9	16.9	17.0	17.1
GDP per capita (EUR)	38,845	39,313	40,353	41,259	42,926
GDP (EUR bn)	653	663	683	703	733
Economic Growth (GDP, annual variation in %)	-0.2	1.4	2.3	2.2	3.2
Domestic Demand (annual variation in %)	-1.4	0.9	3.4	1.8	2.3
Consumption (annual variation in %)	-1.0	0.3	2.0	1.6	1.9
Investment (annual variation in %)	-4.3	2.3	11.0	5.3	5.6
Exports (G&S, annual variation in %)	2.1	4.5	6.5	4.3	6.1
Imports (G&S, annual variation in %)	1.0	4.2	8.4	4.1	5.4
Industrial Production (annual variation in %)	0.6	-2.9	-3.3	2.3	2.0
Retail Sales (annual variation in %)	-3.2	2.0	2.6	1.9	3.0
Unemployment Rate	7.3	7.4	6.9	6.0	4.9
Fiscal Balance (% of GDP)	-2.4	-2.3	-2.1	0.4	1.1
Public Debt (% of GDP)	67.7	67.9	65.2	62.3	56.7
Inflation Rate (HICP, annual variation in %, eop)	1.4	-0.1	0.5	0.7	1.2
Inflation Rate (HICP, annual variation in %)	2.6	0.3	0.2	0.1	1.3
Inflation (PPI, annual variation in %)	-1.3	-2.0	-6.5	-3.3	4.6
Policy Interest Rate (%)	0.25	0.05	0.05	0.0	0.0
Stock Market (annual variation in %)	17.2	5.6	4.1	9.4	12.7
Exchange Rate (vs USD)	1.38	1.21	1.09	1.05	1.20
Exchange Rate (vs USD, aop)	1.33	1.33	1.11	1.11	1.13
Current Account (% of GDP)	9.9	8.6	8.7	8.4	10.2
Current Account Balance (EUR bn)	64.4	56.9	59.3	59.5	75.1
Trade Balance (EUR billion)	46.7	51.0	46.8	51.8	56.9

France Economy Data					
	2013	2014	2015	2016	2017
Population (million)	63.7	64.0	64.3	64.6	64.8
GDP per capita (EUR)	33,251	33,601	34,188	34,496	35,387
GDP (EUR bn)	2,118	2,151	2,198	2,227	2,293
Economic Growth (GDP, annual variation in %)	0.6	1.0	1.0	1.1	2.3
Domestic Demand (annual variation in %)	0.5	0.8	1.2	2.0	2.0
Consumption (annual variation in %)	0.6	0.8	1.4	1.9	1.2
Investment (annual variation in %)	-0.7	0.0	0.9	2.7	4.7
Exports (G&S, annual variation in %)	2.1	3.4	4.4	1.5	4.7
Imports (G&S, annual variation in %)	2.5	4.9	5.7	3.1	4.1
Industrial Production (annual variation in %)	-0.8	-1.0	1.5	0.3	2.4
Retail Sales (annual variation in %)	1.8	1.7	3.6	2.9	3.7
Unemployment Rate	10.3	10.3	10.4	10.1	9.4
Fiscal Balance (% of GDP)	-4.1	-3.9	-3.6	-3.4	-2.6
Public Debt (% of GDP)	93.4	94.9	95.6	96.6	97.0
Inflation Rate (HICP, annual variation in %, eop)	0.8	0.1	0.3	0.8	1.3
Inflation Rate (HICP, annual variation in %)	1.0	0.6	0.1	0.3	1.2
Inflation (PPI, annual variation in %)	-	-	-	-	-
Policy Interest Rate (%)	0.25	0.05	0.05	0.0	0.0
Stock Market (annual variation in %)	18.0	-0.5	8.5	4.9	9.3
Exchange Rate (vs USD)	1.38	1.21	1.09	1.05	1.20
Exchange Rate (vs USD, aop)	1.33	1.33	1.11	1.11	1.13
Current Account (% of GDP)	-0.5	-1.0	-0.4	-0.8	-0.5
Current Account Balance (EUR bn)	-10.8	-20.6	-8.1	-16.9	-13.1
Trade Balance (EUR billion)	-43.0	-42.7	-28.9	-34.5	-48.2

https://www.focus-economics.com/countries/netherlands

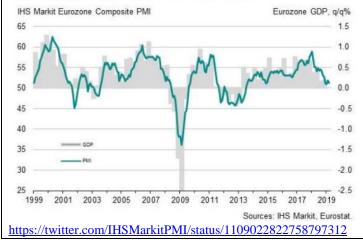
**51.** [17%] (02/07/18) "Economic performance in The Netherlands is vibrant and growth is expected to remain robust, underpinned by <u>sound public finances, healthy job creation and high levels of confidence</u>. The current economic expansion should be used to speed up implementation of reforms to ensure future stability and support more inclusive labour markets, according to a new report from the OECD."

http://www.oecd.org/netherlands/further-reforms-can-foster-moreinclusive-labour-markets-in-the-netherlands.htm

Explain, using some model explained in class, why "sound public finances, healthy job creation and high levels of confidence" would contribute to expand GDP.

**52.** [?%]. Interpret the following information. (22/03/19) "Eurozone Flash PMI falls to 51.3 (51.9 - Feb), with manufacturing sector the primary drag - data pointing to steepest downtown in sector for 6 yrs. Q1 survey data indicates GDP rose 0.2%."

## IHS Markit Eurozone PMI and GDP





Aki Paloheimo @OmglolU · Mar 24 Replying to @IHSMarkitPMI Crisis cycle, of 11 years at near Sunspot cycle min. -1997 - 2008 - 2019 - 2030

Recession cycle of 11 years at near Sunspot cycle max. -1980- 1991 -2001 - 2013 - 2024

**53.** [19%] (26/03/19) "Netherlands Economic Outlook. In the final quarter of last year, the Dutch economy accelerated on the back of firming domestic demand and an improved trade balance. Turning to the first quarter of this year, data presents a mixed bag. Private consumption is expected to ease, despite a rebound in retail sales growth in January, as consumer confidence fell to a multi-year low in March. Consequently, sentiment among consumers moderated significantly in the quarter from Q4 2018. However, sentiment among businesses has remained optimistic in the January–February period despite a moderation in the manufacturing PMI amid a challenging external environment." https://www.focus-economics.com/countries/netherlands

Explain, using some model explained in class, the effects of an increasing domestic demand and an improved trade balance.

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