

FUNDAÇÃO GETULIO VARGAS ESCOLA BRASILEIRA DE ECONOMIA E FINANÇAS

CAO BITTENCOURT FERREIRA

HORIZONTES TEMPORAIS DE INVESTIMENTO

UM PANORAMA MUNDIAL DAS RELAÇÕES ENTRE PRODUTO PER CAPITA E POUPANÇA DESDE 1960 ATÉ 2019

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Professor: João Victor Issler.

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1. INTRODUÇÃO

A relação entre poupança doméstica e produto *per capita* é de central importância para economistas. Segundo Romer (2012, tradução própria): "O investimento é a componente do PIB que liga o presente ao futuro. Os gastos com investimento cumprem um papel central não somente no crescimento de longo prazo, mas também nos ciclos de negócios de curto prazo".

No estudo dessa relação, dividem-se, tradicionalmente, duas escolas de pensamento principais: a clássica e a keynesiana (MANKIW, 2010; ROMER, 2012). A primeira escola atribui à poupança uma função protagonista no fomento de um equilíbrio econômico mais próspero e de uma taxa de crescimento maior até a realização desse equilíbrio. Por sua vez, keynesianos defendem a primazia da renda perante a poupança, sugerindo que elevações nas taxas de crescimento é que precedem elevações nas taxas de poupança, e não ao contrário.

Naturalmente, é indispensável comparar os acertos e equívocos dessas escolas, pois as políticas públicas que recomendam podem até ser contraditórias. Com efeito, neoclássicos, partindo do entendimento de que uma taxa de poupança maior resultará em maior prosperidade econômica, costumam preferir medidas mais austeras e voltadas para o aumento dos investimentos domésticos. Mas, keynesianos, por acreditarem que a taxa de poupança forma-se residualmente a partir da taxa de crescimento do produto, tendem a não priorizar a contribuição da poupança ao crescimento. Assim, acabam geralmente optando por políticas de caráter expansivo, que visam estimular a economia no curto prazo.

O modelo de crescimento exógeno de Solow (1956) e suas adaptações endógenas posteriores partem dos pressupostos neoclássicos típicos e concluem que, no longo prazo, a taxa de poupança doméstica é responsável pelo nível de renda *per capita* no equilíbrio. O modelo também demonstra que aumentos no produto do estado estacionário devido a taxas de poupança maiores produzem crescimento acelerado temporário conforme a economia aproxima-se do novo estado estacionário. Mankiw (2010, tradução própria) sintetiza muito bem as previsões desse modelo: "[...] as consequências de longo prazo de uma redução na taxa de poupança são um estoque de capital e uma renda nacional menores. Por esse motivo, muitos economistas são críticos de déficits orçamentários persistentes." (MANKIW, 2010, tradução própria)

Desse modo, investiga-se aqui a relação de causalidade entre poupança doméstica e produto *per capita* em horizontes temporais variados. Este trabalho diferencia-se pelo seu escopo, tanto no número de países analisados (91 países) quanto no período contemplado pela análise (60 anos). O "panorama" assim traçado corrobora o modelo neoclássico de crescimento, destacando a relevância da taxa de poupança para o crescimento econômico.

2. DADOS UTILIZADOS

2.1. FONTE DOS DADOS E DEFINIÇÃO DE VARIÁVEIS

O Banco Mundial (2020a, 2020b) publica séries temporais de indicadores macroeconômicos diversos. Toma-se as séries referentes ao produto *per capita* e à poupança doméstica bruta para todos os países disponíveis (N = 184) desde o ano de 1960 até 2019¹.

Define-se o produto *per capita* como GDP e a poupança interna bruta como GDS. Os logaritmos dessas variáveis são denominados LGDP e LGDS, respectivamente.

3. METODOLOGIA

3.1. TRATAMENTO DOS DADOS

Realiza-se, primeiro, a identificação continental dos países segundo as seguintes regiões: 1) Américas; 2) Ásia e Pacífico; 3) África Subsariana; 4) Europa; e 5) Oriente Médio e Norte da África.

Depois, mapeia-se os valores inexistentes de GDP e GDS, que correspondem a 8.40% da base de dados, em grande parte concentrando-se em países específicos. Adota-se, como critério de completude, o limite de 30% de não-resposta e, para cada país, substitui-se a mediana anual da região correspondente nas medidas ausentes².

Também substitui-se pela mediana anual da região cinco valores de poupança anômalos na Mauritânia (de 1961 a 1965, logo após o país tornar-se independente da França). Nesses anos, a Mauritânia registra uma poupança de 100% (i.e. claramente um erro contábil).

Constata-se também que há países com GDS negativa em determinados anos (i.e. apresentam endividamento). Como pretende-se log-transformar os dados, adota-se um limite, novamente, de 30% para valores negativos de poupança e descarta-se todos os países cuja poupança negativa exceder esse limite. No restante substitui-se o valor negativo observado pelo valor mínimo anual da região³.

Na etapa final do tratamento dos dados, aplica-se uma transformação logarítmica sobre GDP e GDS e obtém-se as novas variáveis LGDP e LGDS.

3.2. MODELO ECONOMÉTRICO EMPREGADO

Para estudar as relações de causa e efeito entre o crescimento da poupança e do produto *per capita*, convém utilizar um modelo autorregressivo vetorial (VAR). Esse

¹ Os dados estão em frequência anual.

² Disponibiliza-se em anexo um tabelamento detalhado dos valores inexistes por país e destaca-se os 83 países descartados.

³ Os países desse modo descartados são: Burúndi, Guiné-Bissau, Jordão e Serra Leoa.

processo é descrito genericamente pelas equações abaixo:

$$LGDP_{t} = C^{GDP} + \sum_{i=1}^{p} \beta_{i}^{GDP} LGDP_{t-i} + \sum_{i=1}^{p} \beta_{i}^{GDS} LGDS_{t-i} + \varepsilon_{t}^{GDP}$$

$$LGDS_{t} = C^{GDS} + \sum_{i=1}^{p} \beta_{i}^{GDP} LGDP_{t-i} + \sum_{i=1}^{p} \beta_{i}^{GDS} LGDS_{t-i} + \varepsilon_{t}^{GDS}$$

A partir desse modelo estima-se, para cada variável, equações de regressão, funções de resposta a impulso (IRF) e p-valores para o teste de causalidade de Granger. Para tanto, utiliza-se a linguagem de programação R e o pacote *vars* em conjunto com os seguintes pacotes adicionais: *gghighlight*, *ggridges*, *naniar*, *patchwork*, *plyr*, *scales*, *stargazer*, *tidyverse* e *viridis*. O código assim elaborado encontra-se em anexo.

3.2.1. Limitações e Problemas Metodológicos

Uma dificuldade importante na implementação de um VAR é a escolha correta da ordem do modelo. Assim, primeiramente, calcula-se os critérios de informação AIC, HQ, SC e FPE para cada país e compara-se os valores resultantes regionais (Tabela I).

Tabela I - Resumo dos Critérios de Informação por Região

				Criteria	ļ	
Region	Measure	AIC	HQ	SC	FPE	(All)
Americas	Max	15	15	2	15	15
	Min	1	1	1	1	1
	Mean	8	3	1	4	4
	Median	14	2	1	2	2
Asia-Pacific	Max	15	15	15	15	15
	Min	1	1	1	1	1
	Mean	5	2	1	4	3
	Median	2	1	1	2	1
Europe	Max	15	15	2	15	15
-	Min	1	1	1	1	1
	Mean	10	4	1	5	5
	Median	15	2	1	2	2
Middle East and	Max	15	15	2	15	15

North Africa	Min	1	1	1	1	1
	Mean	9	4	1	6	5
	Median	13	1	1	7	1
Sub-Saharan	Max	15	15	1	15	15
Africa	Min	1	1	1	1	1
	Mean	9	2	1	3	4
	Median	14	1	1	2	1

Em geral, os critérios de informação acima recomendam que o modelo não tenha ordem muito elevada. Porém o resultado não é exatamente uniforme e requer um pouco mais de exploração. Para isso, realiza-se uma breve iteração entre processos VAR(1) e VAR(15)⁴, observando a quantidade de modelos estáveis, os testes de Granger conclusivos e a proporção causal entre poupança e produto *per capita*.

Tabela II - Causalidade de Granger e Estabilidade por Ordem do Modelo (95% CI)

		Number of Conclusive	_	
VAR Order	Stable Models	(A) LGDP causes LGDS	(B) LGDS causes LGDP	(B/A) Causal Proportion
1	89	23 (25.84%)	25 (28.09%)	1.09
2	90	22 (24.44%)	13 (14.44%)	0.59
3	91	12 (13.19%)	15 (16.48%)	1.25
4	88	7 (7.95%)	9 (10.23%)	1.29
5	86	8 (9.30%)	17 (19.77%)	2.13
6	86	9 (10.47%)	14 (16.28%)	1.56
7	85	17 (20.00%)	16 (18.82%)	0.94
8	81	13 (16.05%)	14 (17.28%)	1.08
9	79	11 (13.92%)	21 (26.58%)	1.91
10	75	5 (6.67%)	17 (22.67%)	3.40
11	69	5 (7.25%)	16 (23.19%)	3.20
12	60	8 (13.33%)	20 (33.33%)	2.50
13	50	10 (20.00%)	17 (34.00%)	1.70
14	40	10 (25.00%)	11 (27.50%)	1.10
15	26	5 (19.23%)	3 (11.54%)	0.60

Nota: valores máximos em negrito.

⁴ O número máximo padrão de *lags* no pacote *vars* é 10, mas decide-se expandir esse limite para 15, que é o último múltiplo do número de anos no período (N = 60) em que ainda existe uma quantidade substancial de modelos com raízes dentro do círculo unitário. Assim é justificado tomar 15 como limite superior para a ordem.

Como esperado, o contingente de modelos estáveis decresce com a quantidade de *lags*, o que pode dificultar o estudo de efeitos econômicos no longo prazo quando a frequência dos dados é baixa.

Além disso, como ilustra a Figura I abaixo, a direção causal predominante varia de acordo com a quantidade de *lags* no modelo, sugerindo que a relação entre produto *per capita* e poupança é diferente no curto, no médio e no longo prazo. De fato, o impacto da poupança no produto *per capita* é notavelmente maior em certas ordens, destacando-se os processos VAR(5), VAR(9), VAR(10), VAR(11), VAR(12) e VAR(13). Pois, embora verifique-se o número máximo de causalidades de Granger do tipo poupança-produto no modelo VAR(1), nesse mesmo modelo verifica-se também grande número de causalidades produto-poupança. Assim, parece ser em torno do quinquênio e da década que a poupança ganha proporcionalmente uma importância maior⁵.

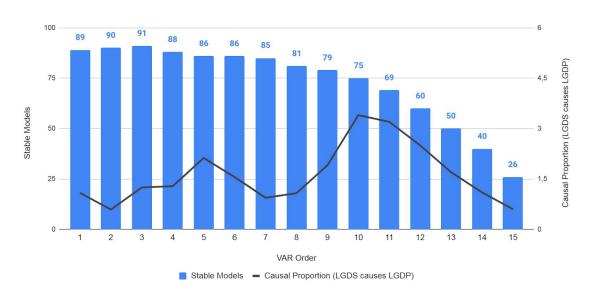


Figura I - Proporção Causal e Estabilidade por Ordem do Modelo (95% CI)

É evidente, portanto, que existe um *trade-off* na escolha de um processo VAR para estudar interações entre o crescimento da poupança e do produto, pois dependendo da importância atribuída a cada um dos critérios de informação (Tabela I) e dos critérios de pesquisa (Tabela II), a ordem ideal do modelo pode variar bastante.

Então, a fim de equilibrar todas essas diretrizes, e contrastar os resultados de horizontes temporais diferentes, emprega-se aqui dois processos: um VAR(3) e um VAR(10).

⁵ É interessante notar como esse achado é comparável aos antigos planos *quinquenais* de investimento da União Soviética. Isto é, apesar de terem produzido distorções alocativas desastrosas, o *período* desses planos parecia estar correto: a poupança e, portanto, o investimento tem um impacto relativamente maior entre cinco e dez anos.

4. RESULTADOS

A seguir apresenta-se uma síntese das regressões realizadas. Como o número de modelos estáveis é muito elevado, opta-se por somente ilustrar os resultados obtidos em uma região (nesse caso, a Europa). As regressões específicas de cada país encontra-se em anexo, bem como as suas respectivas funções de resposta a impulso (IRF).

Não destaca-se os valores dos coeficientes, apenas a sua significância nos intervalos de confiança usuais. As regressões em anexo são mais detalhadas. Também omite-se os resíduos, pois em geral os valores de R² obtidos são bastante altos (cerca de 90%). Isso é esperado, tendo em vista que a poupança corresponde a uma porcentagem do produto (i.e. ela é *parte* dele).

Também disponibiliza-se em anexo as demais regressões agrupadas por região, de modo a facilitar comparações. Finalmente, omite-se, nesta exposição, os testes de causalidade de Granger, uma vez que já foram resumidos na Tabela II acima. Entretanto, eles são discutidos na seção 5 e estão detalhados em anexo junto aos demais resultados.

4.1. REGRESSÕES

As regressões dos países europeus são visualmente resumidas nas Figuras II e III. Essas figuras são análogas a *mapas de calor*, em que cada retângulo é correspondente ao valor de uma variável em determinada categoria e sua cor varia conforme a magnitude desse valor.

Nesses "mapas de calor", então, as variáveis em questão (eixo horizontal) são os coeficientes de regressão: uma constante e os coeficientes associados aos *lags* de LGDP e LGDS⁶. As categorias (eixo vertical) são os códigos ISO de três letras dos países analisados. E o preenchimento dos retângulos é dado pelo p-valor de cada coeficiente, indicando se a variável é, ou não, significativa e, se sim, em que nível de significância (e.g. se um coeficiente não é significativo em determinado país, o retângulo a ele associado tem cor cinza, mas se for significativo no intervalo de confiança de 95% tem cor verde).

Adicionalmente, os gráficos são facetados, de modo que a faceta "LGDP" corresponde às equações de regressão para a variável LGDP e a faceta "LGDS" às equações da variável LGDS. Assim, obtém-se uma "visão de cima" de todas as tabelas de regressão simultaneamente: de fato, cada linha nas Figuras II e III é uma regressão visual simplificada.

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⁶ Por simplicidade, denota-se o i-ésimo lag de uma variável "X" por "X Li".

Figura II - Modelos VAR(3) de Produto (LGDP) e Poupança (LGDS) na Europa

VAR(3) Models by Country (Europe)

Regression Equations for LGDP and LGDS

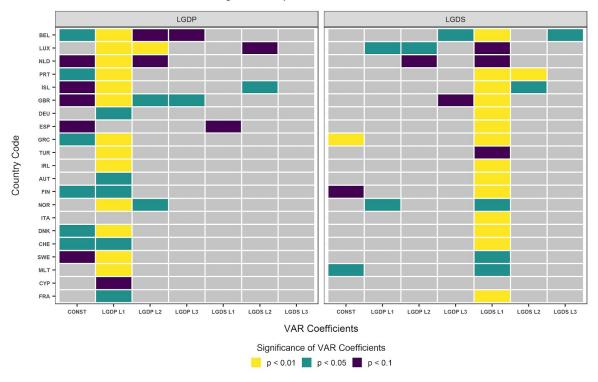
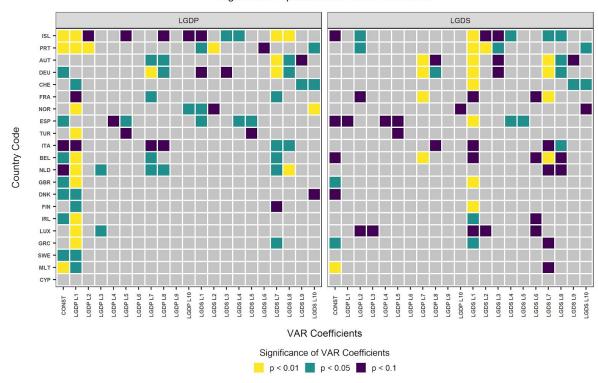


Figura III - Modelos VAR(10) de Produto (LGDP) e Poupança (LGDS) na Europa

VAR(10) Models by Country (Europe)

Regression Equations for LGDP and LGDS



5. DISCUSSÃO

Os resultados acima e em anexo estabelecem uma relação de causalidade bidirecional, no curto prazo, entre o crescimento da poupança e o crescimento do produto *per capita*; no longo prazo, testemunham a favor da unidirecionalidade da relação, favorecendo a influência da poupança sobre o crescimento do produto. Encontra-se amplo respaldo para esses achados na literatura (e.g. BACHA, 1990; GREGORIO, 1992; MORANDÉ, 1998; NAJARZADEH, REED e TASAN, 2014; OTANI e VILLANUEVA, 1990; SINGH, 2010; TURAN e EGJERGJI, 2014). De fato, no caso chinês, por exemplo, Hooi Lean e Song (2009) afirmam:

China's economic growth is found to have a long-running relationship with household savings and enterprise savings. Bilateral causality exists between the domestic savings growth and the economic growth in the short-run. In the long-run, a unidirectional causality exists running from the domestic savings growth to the economic growth. (HOOI LEAN; SONG, 2009)

As evidências de um estudo indiano (PATRA; MURTHY; KURUVA; MOHANTY, 2017, tradução própria) "favorecem as previsões dos modelos de crescimento exógeno neoclássico e de crescimento endógeno pós-neoclássico" e "sugerem a existência de uma relação causal unidirecional de longo prazo partindo da poupança para o crescimento econômico." De acordo com os autores, "os fatos empíricos estilizados referentes ao efeito da poupança no estado estacionário apontam para a necessidade de acelerar a poupança doméstica a fim de financiar o investimento doméstico e promover maior renda e crescimento."

Na Nigéria, outro grupo de pesquisadores atesta a eficácia do modelo de Solow (1956) e de suas adaptações:

The result showed a strong unidirectional causality from domestic private savings to economic growth in Nigeria. The result supported Solow's hypothesis. Also the evidence from Johansen co-integration result indicated that there is a positive long run relationship between domestic savings and economic growth. In view of the findings, appropriate policies mix that will enhance domestic savings in the country should be pursued. (ODIONYE; EMEROLE; UGWUEGBE, 2016)

Achados desse tipo não restringem-se aos exemplos citados das economias chinesa, indiana e nigeriana, mas são amplamente documentados e reafirmam a coerência dos modelos de crescimento neoclássicos e pós-neoclássicos:

Consistent with theoretical underpinnings, empirical evidence also strongly support close inter-linkages between savings and economic growth in a cross-country perspective. It is observed that economies witnessing rapid economic growth such

as China, India, Indonesia, Malaysia, Singapore, South Korea and Thailand, etc. are also characterized by high saving rates during their developmental phase. Similarly, many countries in sub-Saharan Africa and Latin America typically save at a low rate and experience slow economic growth. (PATRA; MURTHY; KURUVA; MOHANTY, 2017, grifo próprio)

No presente estudo, exemplifica-se essas mesmas conclusões com os países europeus⁷. Primeiramente comenta-se as regressões e, em seguida, os testes de causalidade de Granger. Nos modelos VAR(3) - cujo horizonte temporal é menor - praticamente todos os países apresentam coeficientes significativos de caráter univariável para LGDP (i.e. influências do tipo produto-produto), porém apenas na Islândia - e, em menor grau, em Luxemburgo e na Espanha - os coeficientes significativos têm caráter multivariável (i.e. poupança-produto). E o mesmo vale nas equações de regressão para LGDS, em que verifica-se influência do produto no curto prazo, mas em um número reduzido de países (e.g. Bélgica e Noruega).

Porém, nos modelos VAR(10) - cujo horizonte temporal é maior - as duas variáveis passam a interagir de maneira cruzada e muito evidente. Assim, países em que o crescimento da poupança e do produto são essencialmente autorregressivos, dado um pequeno horizonte temporal, demonstram um impacto mútuo e significativo dessas mesmas variáveis quando estende-se o horizonte temporal, com ênfase bem clara para a ação da poupança no produto. Corrobora-se, portanto, a maior proporcionalidade causal da poupança sobre o produto em torno do quinquênio e da década, como argumentado anteriormente⁸.

De fato, as regressões dos países europeus (N = 21), segundo o modelo VAR(3), indicam que há somente 3 (14.28%) países em que a poupança tem alguma influência significativa no produto e 5 (23.80%) em que o produto tem alguma influência significativa na poupança. Mas quando emprega-se um VAR(10), esses números passam para 15 (71.42%) e 11 (52.38%), respectivamente. Com isso, a quantidade de países em que constata-se coeficientes significativos para a poupança sobre o produto é cerca de 5 vezes maior no modelo VAR(10) em relação ao modelo VAR(3) e, com respeito ao produto sobre a poupança, esse valor equivale a 2 vezes mais no modelo VAR(10) em relação ao modelo VAR(3). Logo, a poupança ganha mais significância quando aumenta-se o horizonte temporal.

Outra descoberta importante é que países que apresentam causalidade de Granger, quando estudados com processos VAR de uma ordem específica, podem não apresentar essa

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⁷ Novamente, os resultados para as demais regiões e países estão em anexo.

⁸ Segundo a Figura III, esse horizonte temporal, para os países europeus analisados, está centrado nos sétimos e oitavos anos. Mas em outras regiões esse número é diferente. Em geral, como já demonstrado, a maior proporcionalidade causal da poupança concentra-se no décimo ano.

mesma propriedade quando utiliza-se um modelo de outra ordem. Como a ordem do modelo representa uma espécie de "limite temporal" de influência da poupança e do produto, isso sugere que o crescimento da poupança de um país causa crescimento em seu produto e/ou o crescimento do produto de um país causa crescimento em sua poupança predominantemente *a partir* de um tempo específico e *até* um tempo específico.

Portanto, parece haver entre essas duas variáveis uma certa "janela de impacto", cujo tamanho é diferente para cada país. Assim, os efeitos de curto e de longo prazo dessas duas variáveis concentram-se dentro de um período finito. Em outras palavras, o impacto de um aumento ou de uma diminuição na poupança ou no produto "reverbera" durante os anos subsequentes, exercendo o seu máximo efeito em torno de uma década e depois torna-se progressivamente menor.

Essa mesma conclusão é visível nas funções de resposta a impulso, em anexo - particularmente através de iterações entre períodos maiores e menores de previsão com as IRF's. Destaca-se que essas gradativas "concentração" e "dispersão" dos efeitos da poupança correspondem precisamente ao modelo de Solow (1956), pois nele "[...] um aumento na taxa de poupança tem um efeito positivo sobre a renda *per capita*: há um período de crescimento rápido, mas eventualmente esse crescimento desacelera conforme o novo estado estacionário é alcançado." (MANKIW, 2010, tradução própria). Analogamente, Romer (2012) adverte:

Higher saving leads to faster growth in the Solow model, but only temporarily. An increase in the rate of saving raises growth only until the economy reaches the new steady state. If the economy maintains a high saving rate, it will maintain a large capital stock and a high level of output, but it will not maintain a high rate of growth forever. (ROMER, 2012)

6. CONCLUSÃO

Este estudo tomou dados do Banco Mundial (2020a, 2020b) referentes à poupança doméstica bruta e ao produto *per capita* em 184 países a fim de investigar a relação entre essas variáveis macroeconômicas em diferentes horizontes temporais. Após uma limpeza dos dados e rejeição criteriosa de países devido a qualidade contábil insuficiente, restringiu-se o escopo para 91 países.

Comparou-se autoregressões vetoriais de duas ordens - VAR(3) e VAR(10) -, bem como os testes de causalidade de Granger resultantes. Calculou-se também as funções de resposta a impulso para cada país. Adicionalmente, mapeou-se a proporção causal entre poupança e produto *per capita* em iterações de processos VAR(1) a VAR(15).

Os achados corroboraram as teorias de crescimento neoclássica e pós-neoclássica

(MANKIW, 2010; ROMER, 2012; SOLOW, 1956), evidenciando, como previsto no modelo de Solow, que a poupança doméstica afeta positivamente a renda *per capita* no longo prazo e que um aumento na taxa de poupança produz crescimento maior até que um novo estado estacionário seja alcançado.

Também constatou-se causalidade bidirecional no curto prazo e um predomínio marcante de causalidade unidirecional a partir da poupança dado um horizonte temporal mais extenso, cujo tamanho parece ser variável para cada país, porém predominantemente centrado em torno de uma década. Todas essas conclusões estão em concordância com a literatura (BACHA, 1990; GREGORIO, 1992; HOOI LEAN e SONG, 2009; MORANDÉ, 1998; NAJARZADEH, REED e TASAN, 2014; ODIONYE, EMEROLE e UGWUEGBE, 2016; OTANI e VILLANUEVA, 1990; PATRA, MURTHY, KURUVA e MOHANTY, 2017; SINGH, 2010; TURAN e GJERGJI, 2014).

Em termos de políticas públicas, convém que, além de incentivos econômicos para aumento da poupança, tenha-se em vista os horizontes temporais peculiares de interação entre produto *per capita* e poupança para cada país. Assim, atenta-se ao tempo necessário para que os investimentos do setor público e privado ou mudanças nos padrões de consumo e poupança produzam seus efeitos esperados por completo, e identifica-se com mais exatidão a eficácia das políticas públicas em promover crescimento econômico no longo prazo.

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ANEXO - PAÍSES COM POUPANÇA DOMÉSTICA BRUTA (GDS) NEGATIVA

Country Name	Region	Number of Negative GDS
Bangladesh	Asia-Pacific	2 (3.33%)
Benin	Sub-Saharan Africa	13 (21.66%)
Botswana	Sub-Saharan Africa	8 (13.33%)
Burkina Faso	Sub-Saharan Africa	5 (8.33%)
Burundi	Sub-Saharan Africa	34 (56.66%)
Central African Republic	Sub-Saharan Africa	10 (16.66%)
Chad	Sub-Saharan Africa	13 (21.66%)
Congo, Rep.	Sub-Saharan Africa	1 (1.66%)
El Salvador	Americas	11 (18.33%)
Eswatini	Sub-Saharan Africa	5 (8.33%)
Gambia, The	Sub-Saharan Africa	13 (21.66%)
Ghana	Sub-Saharan Africa	3 (5.00%)
Guinea-Bissau	Sub-Saharan Africa	29 (48.33%)
Guyana	Americas	7 (11.66%)
Indonesia	Asia-Pacific	2 (3.33%)
Iraq	Middle East and North Africa	2 (3.33%)
Jamaica	Americas	4 (6.66%)
Jordan	Middle East and North Africa	25 (41.66%)
Kuwait	Middle East and North Africa	1 (1.66%)
Madagascar	Sub-Saharan Africa	2 (3.33%)
Malawi	Sub-Saharan Africa	14 (23.33%)
Mali	Sub-Saharan Africa	11 (18.33%)
Malta	Europe	1 (1.66%)
Mauritania	Sub-Saharan Africa	10 (16.66%)
Niger	Sub-Saharan Africa	3 (5.00%)
Papua New Guinea	Asia-Pacific	2 (3.33%)
Rwanda	Sub-Saharan Africa	11 (18.33%)
Sierra Leone	Sub-Saharan Africa	19 (31.66%)
Togo	Sub-Saharan Africa	1 (1.66%)
Uganda	Sub-Saharan Africa	5 (8.33%)
Zimbabwe	Sub-Saharan Africa	15 (25.00%)

Nota: países descartados da análise em negrito.

Missing Values (Americas)

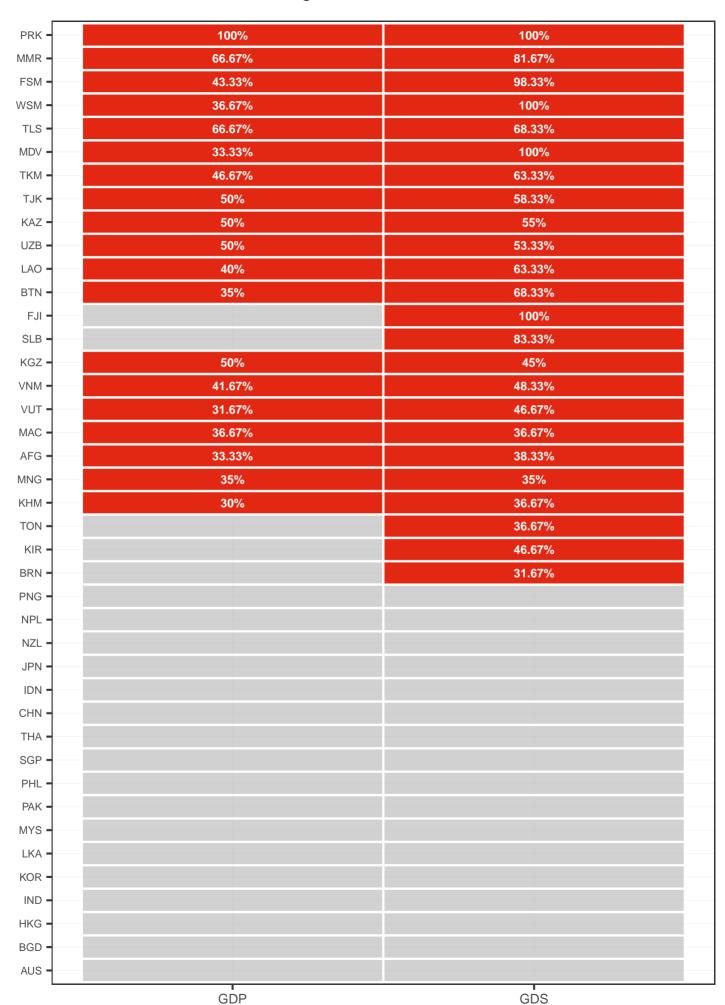
Missingness Threshold = 30%



Missing Values (Asia-Pacific)

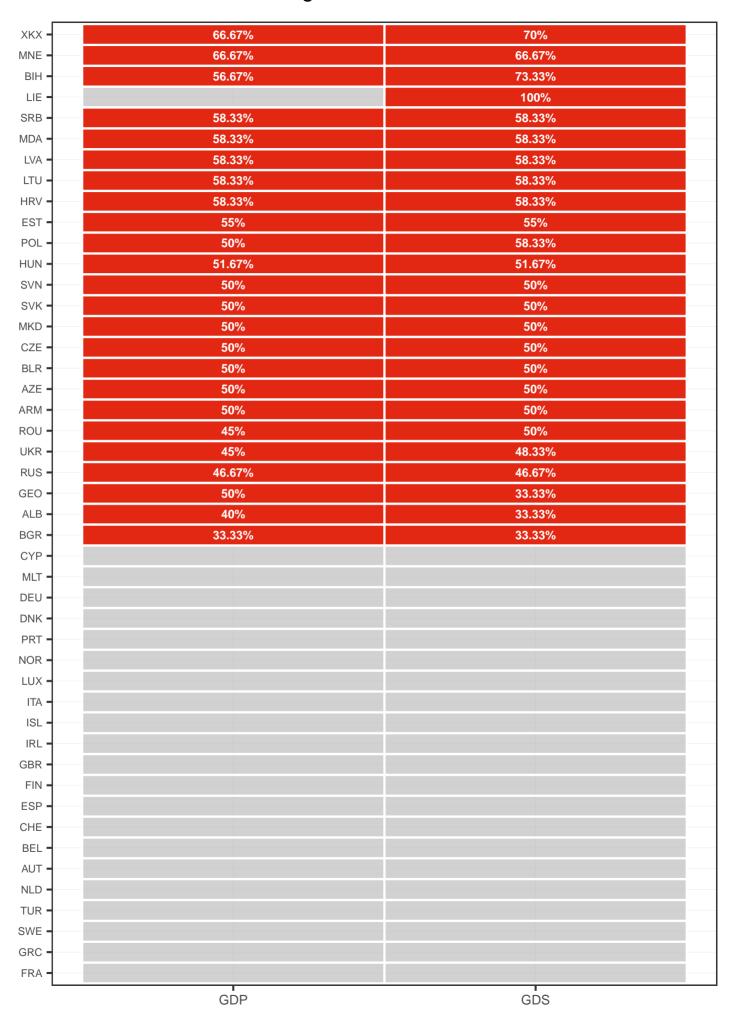
Country Code

Missingness Threshold = 30%



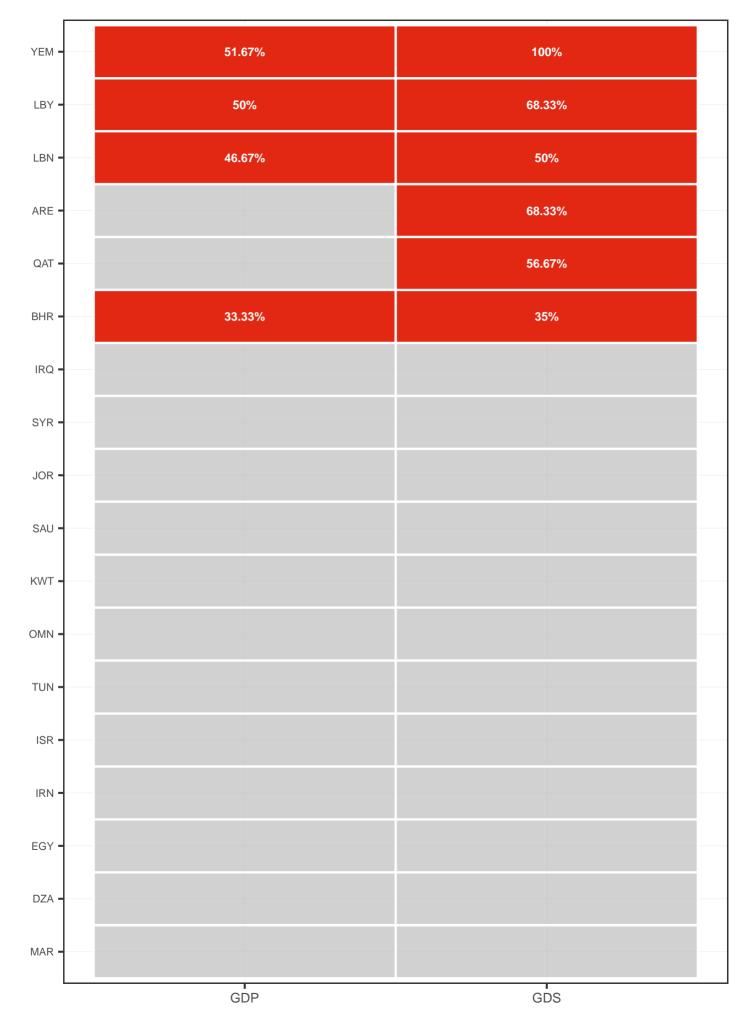
Missing Values (Europe)

Missingness Threshold = 30%



Missing Values (Middle East and North Africa)

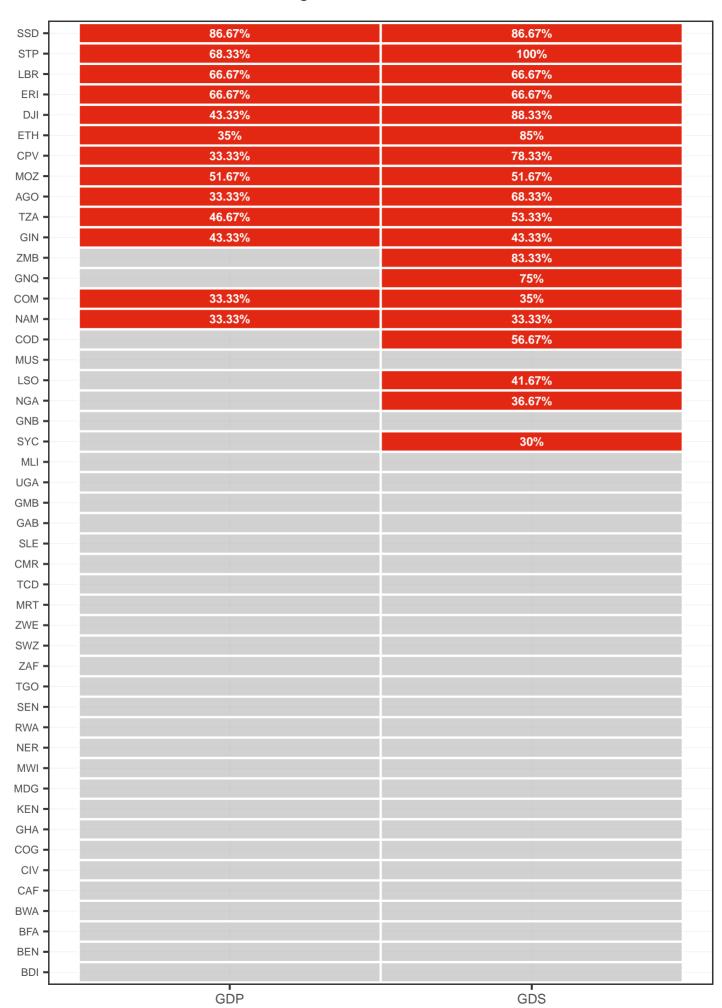
Missingness Threshold = 30%



Country Code

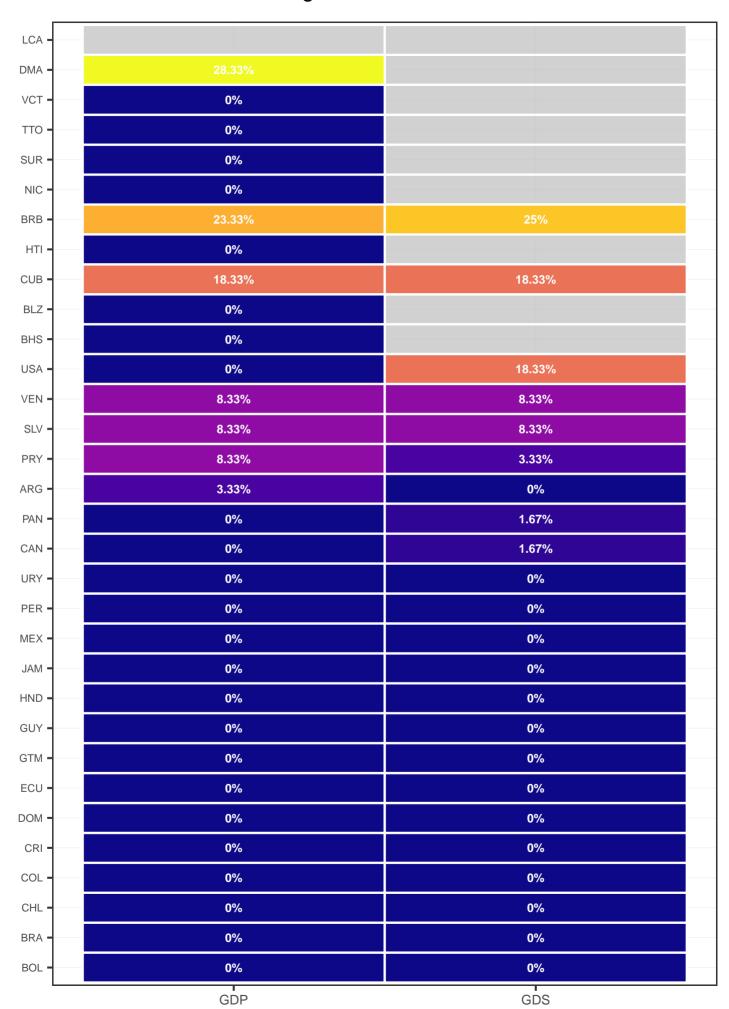
Missing Values (Sub-Saharan Africa)

Missingness Threshold = 30%



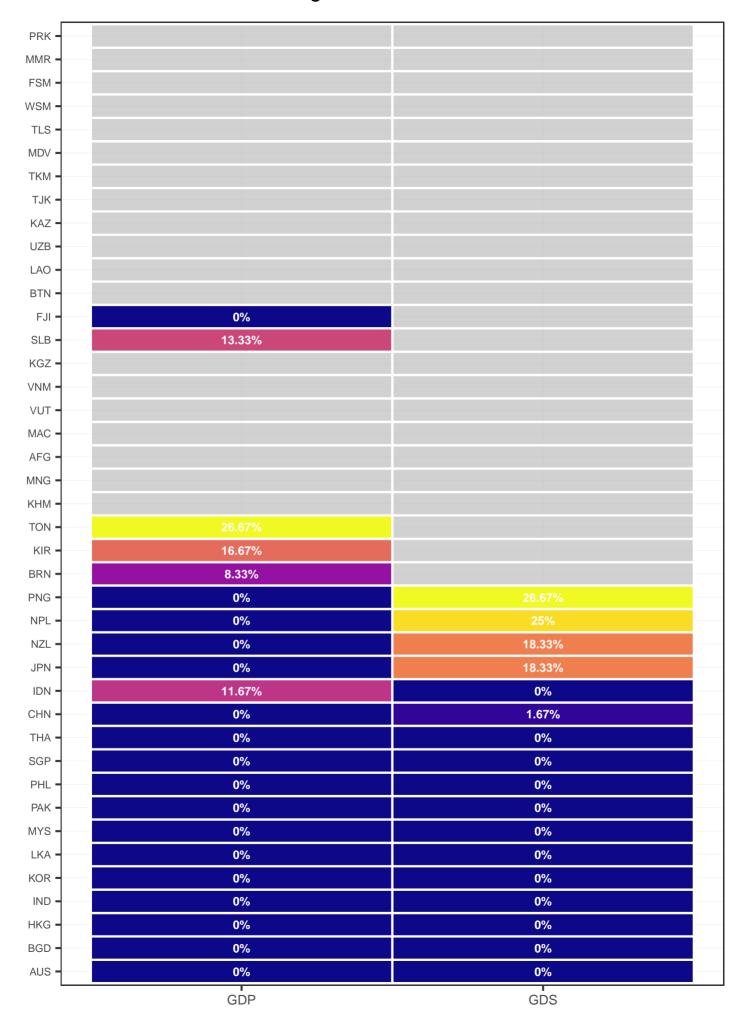
Valid Data (Americas)

Missingness Threshold = 30%



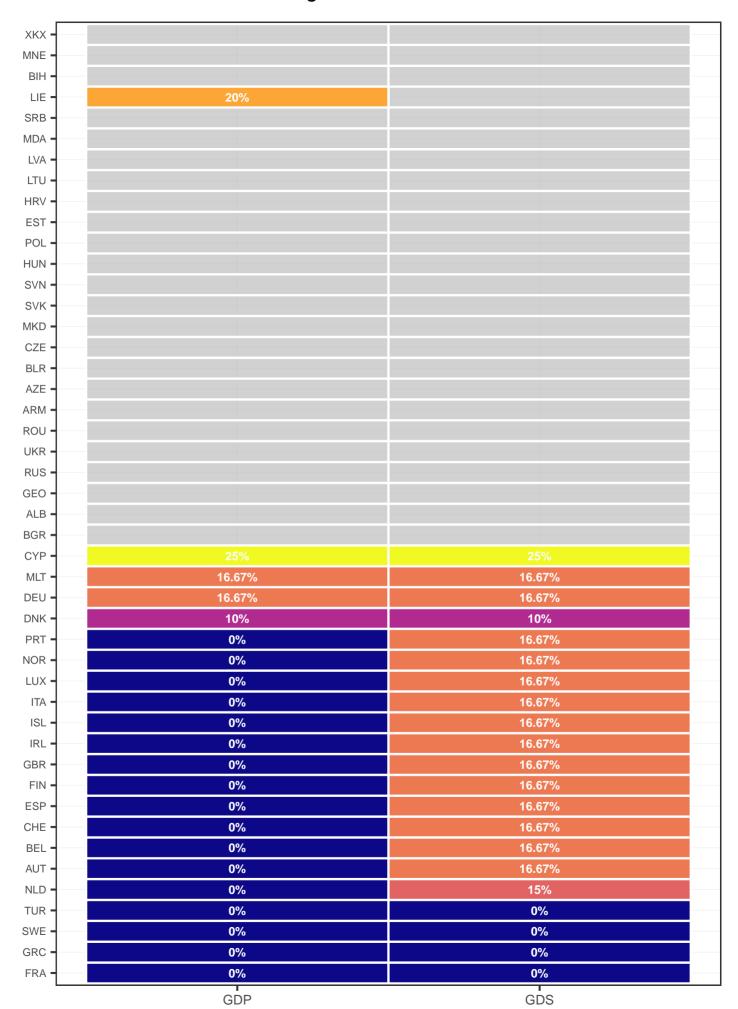
Valid Data (Asia-Pacific)

Missingness Threshold = 30%



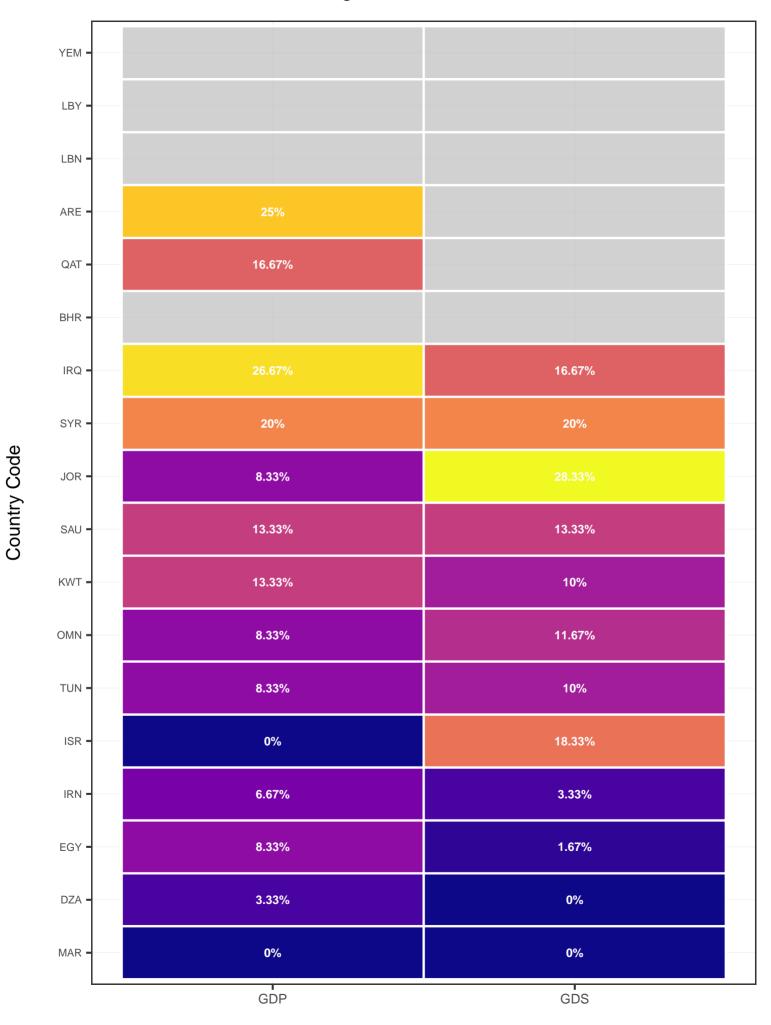
Valid Data (Europe)

Missingness Threshold = 30%



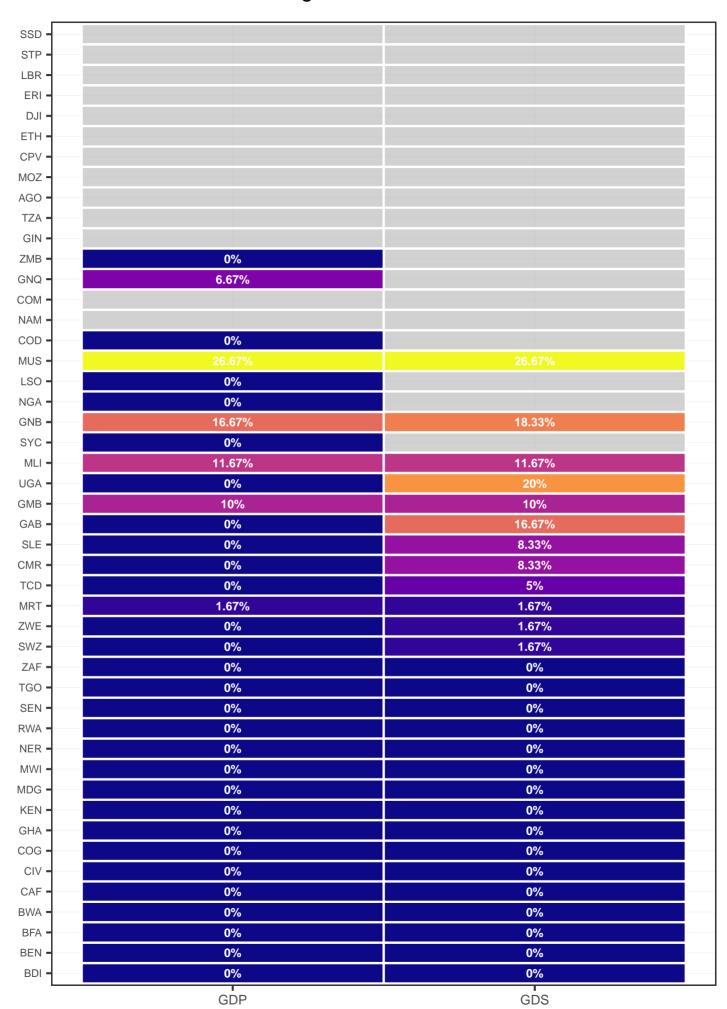
Valid Data (Middle East and North Africa)

Missingness Threshold = 30%



Valid Data (Sub-Saharan Africa)

Missingness Threshold = 30%



ANEXO – MODELOS VAR(3)

VAR(3) Model - Algeria

	Dependent Variable		
	LGDS	LGDP	
LGDS - Lag 1	1.077***	0.212*	
	(0.205)	(0.107)	
LGDP - Lag 1	0.091	0.663***	
	(0.373)	(0.195)	
LGDS - Lag 2	-0.241	0.010	
	(0.255)	(0.133)	
LGDP - Lag 2	0.003	-0.049	
	(0.436)	(0.228)	
LGDS - Lag 3	0.266	0.119	
	(0.200)	(0.105)	
LGDP - Lag 3	-0.274	-0.074	
	(0.289)	(0.151)	
Constant	0.730	1.298***	
	(0.556)	(0.291)	
Observations	57	57	
\mathbb{R}^2	0.970	0.987	
Adjusted R ²	0.966	0.986	
Residual Std. Error ($df = 50$)	0.214	0.112	
F Statistic (df = 6 ; 50)	268.884***	655.891***	

VAR(3) Model - Argentina

	Dependen	Dependent Variable		
	LGDS	LGDP		
LGDS - Lag 1	0.789**	-0.148		
	(0.302)	(0.358)		
LGDP - Lag 1	-0.113	0.889^{***}		
	(0.243)	(0.288)		
LGDS - Lag 2	-0.273	-0.086		
	(0.351)	(0.416)		
LGDP - Lag 2	0.456	0.133		
	(0.303)	(0.359)		

LGDS - Lag 3	0.584** (0.258)	0.621** (0.305)
LGDP - Lag 3	-0.493**	-0.423
	(0.223)	(0.265)
Constant	0.626^{**}	0.771^{**}
	(0.278)	(0.329)
Observations	57	57
\mathbb{R}^2	0.936	0.931
Adjusted R ²	0.928	0.923
Residual Std. Error ($df = 50$)	0.190	0.225
F Statistic (df = 6; 50)	121.159***	113.275***

VAR(3) Model - Australia

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.650*	-0.051
	(0.351)	(0.268)
LGDP - Lag 1	0.720	1.329***
	(0.463)	(0.354)
LGDS - Lag 2	0.248	0.232
	(0.427)	(0.326)
LGDP - Lag 2	-0.877	-0.639
	(0.608)	(0.465)
LGDS - Lag 3	-0.240	-0.254
	(0.323)	(0.247)
LGDP - Lag 3	0.455	0.357
	(0.417)	(0.319)
Constant	0.004	0.201
	(0.259)	(0.198)
Observations	57	57
R^2	0.985	0.992
Adjusted R ²	0.984	0.992
Residual Std. Error ($df = 50$)	0.124	0.095
F Statistic (df = 6; 50)	565.355***	* 1,097.150***

VAR(3) Model - Austria

	Dependent Variable		
	LGDS	LGDP	
LGDS - Lag 1	1.514***	0.445	
	(0.408)	(0.362)	
LGDP - Lag 1	-0.203	0.879^{**}	
	(0.464)	(0.413)	
LGDS - Lag 2	-0.926	-0.722	
	(0.591)	(0.525)	
LGDP - Lag 2	0.378	0.249	
	(0.674)	(0.599)	
LGDS - Lag 3	0.303	0.313	
	(0.412)	(0.366)	
LGDP - Lag 3	-0.094	-0.189	
	(0.449)	(0.399)	
Constant	0.182	0.331	
	(0.286)	(0.254)	
Observations	57	57	
R^2	0.993	0.995	
Adjusted R ²	0.992	0.994	
Residual Std. Error ($df = 50$)	0.103	0.092	
F Statistic ($df = 6$; 50)	1,205.280***	1,583.946***	

VAR(3) Model - Barbados

	Dependent Variable		
	LGDS	LGDP	
LGDS - Lag 1	0.851***	-0.001	
	(0.170)	(0.046)	
LGDP - Lag 1	0.154	1.454***	
	(0.612)	(0.165)	
LGDS - Lag 2	-0.149	0.012	
	(0.216)	(0.058)	
LGDP - Lag 2	0.316	-0.618**	
	(0.990)	(0.267)	

LGDS - Lag 3	0.103 (0.162)	-0.029 (0.044)
LGDP - Lag 3	-0.333 (0.555)	0.160 (0.150)
Constant	0.157 (0.294)	0.207** (0.079)
Observations	57	57
\mathbb{R}^2	0.943	0.996
Adjusted R ²	0.936	0.996
Residual Std. Error ($df = 50$)	0.300	0.081
F Statistic ($df = 6; 50$)	137.801***	2,365.941***

VAR(3) Model - Belgium

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	1.155***	0.101
	(0.333)	(0.281)
LGDP - Lag 1	0.192	1.282***
	(0.400)	(0.338)
LGDS - Lag 2	0.464	0.398
	(0.485)	(0.410)
LGDP - Lag 2	-0.989	-0.957*
	(0.592)	(0.500)
LGDS - Lag 3	-0.688**	-0.450
	(0.325)	(0.275)
LGDP - Lag 3	0.836^{**}	0.600^{*}
	(0.373)	(0.316)
Constant	0.236	0.351**
	(0.203)	(0.172)
Observations	57	57
R^2	0.991	0.994
Adjusted R ²	0.989	0.993
Residual Std. Error ($df = 50$)	0.107	0.090
F Statistic (df = 6; 50)	872.536***	1,295.015***

VAR(3) Model - Benin

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.420***	-0.012
	(0.137)	(0.019)
LGDP - Lag 1	0.608	0.818***
	(0.989)	(0.139)
LGDS - Lag 2	-0.055	-0.010
	(0.150)	(0.021)
LGDP - Lag 2	0.340	0.158
	(1.276)	(0.179)
LGDS - Lag 3	0.285^{**}	0.036^{*}
	(0.133)	(0.019)
LGDP - Lag 3	-0.101	-0.017
	(0.998)	(0.140)
Constant	-4.004**	0.259
	(1.596)	(0.224)
Observations	57	57
\mathbb{R}^2	0.822	0.977
Adjusted R ²	0.800	0.974
Residual Std. Error ($df = 50$)	0.923	0.129
F Statistic (df = 6 ; 50)	38.434***	353.782***

VAR(3) Model - Bolivia

	Dependen	Dependent Variable	
	LGDS	LGDP	
LGDS - Lag 1	1.172***	0.165*	
	(0.213)	(0.089)	
LGDP - Lag 1	-0.352	0.761***	
	(0.512)	(0.215)	
LGDS - Lag 2	-0.151	-0.043	
	(0.259)	(0.108)	
LGDP - Lag 2	0.483	0.117	
	(0.654)	(0.274)	

LGDS - Lag 3	-0.101 (0.174)	-0.019 (0.073)
LGDP - Lag 3	-0.099 (0.425)	-0.015 (0.178)
Constant	0.222 (0.497)	0.488** (0.208)
Observations	57	57
\mathbb{R}^2	0.954	0.988
Adjusted R ²	0.948	0.987
Residual Std. Error ($df = 50$)	0.241	0.101
F Statistic (df = 6; 50)	171.547***	703.203***

VAR(3) Model - Botswana

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.785***	0.028
	(0.144)	(0.028)
LGDP - Lag 1	0.885	1.242***
	(0.745)	(0.146)
LGDS - Lag 2	0.405**	0.017
	(0.174)	(0.034)
LGDP - Lag 2	-1.591	-0.648***
	(1.106)	(0.216)
LGDS - Lag 3	-0.317**	-0.001
	(0.144)	(0.028)
LGDP - Lag 3	0.838	0.300^{**}
	(0.685)	(0.134)
Constant	-0.122	0.606^{***}
	(0.858)	(0.168)
Observations	57	57
R^2	0.968	0.996
Adjusted R ²	0.964	0.995
Residual Std. Error ($df = 50$)	0.504	0.099
F Statistic (df = 6; 50)	251.261***	* 2,056.326***

VAR(3) Model - Brazil

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.996***	0.268
	(0.256)	(0.199)
LGDP - Lag 1	-0.058	0.816***
	(0.323)	(0.251)
LGDS - Lag 2	0.205	0.240
	(0.312)	(0.243)
LGDP - Lag 2	-0.150	-0.298
	(0.412)	(0.320)
LGDS - Lag 3	-0.126	-0.256
	(0.261)	(0.203)
LGDP - Lag 3	0.091	0.210
	(0.285)	(0.222)
Constant	0.507	0.610^{*}
	(0.399)	(0.310)
Observations	57	57
\mathbb{R}^2	0.971	0.984
Adjusted R ²	0.968	0.982
Residual Std. Error ($df = 50$)	0.196	0.153
F Statistic (df = 6 ; 50)	281.586***	501.348***

VAR(3) Model - Burkina Faso

	Dependent Variable	
	LGDS LGDP	
LGDS - Lag 1	0.524*** 0.022	
	(0.142) (0.023)	
LGDP - Lag 1	0.389 1.164***	
	(0.903) (0.144)	
LGDS - Lag 2	0.140 -0.018	
	(0.164) (0.026)	
LGDP - Lag 2	0.649 -0.174	
	(1.394) (0.223)	

LGDS - Lag 3	0.061 (0.142)	0.002 (0.023)
LGDP - Lag 3	-0.650 (0.916)	-0.016 (0.146)
Constant	-1.365 (0.889)	0.163 (0.142)
Observations	57	57
\mathbb{R}^2	0.684	0.975
Adjusted R ²	0.646	0.972
Residual Std. Error ($df = 50$)	0.760	0.121
F Statistic (df = 6; 50)	18.062***	324.684***

VAR(3) Model - Cameroon

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.604***	0.075
	(0.169)	(0.098)
LGDP - Lag 1	0.393	0.962***
	(0.293)	(0.171)
LGDS - Lag 2	0.111	0.177
	(0.194)	(0.113)
LGDP - Lag 2	-0.045	-0.224
	(0.380)	(0.222)
LGDS - Lag 3	0.245	-0.106
	(0.178)	(0.104)
LGDP - Lag 3	-0.362	0.048
	(0.276)	(0.161)
Constant	0.324	0.723^{*}
	(0.634)	(0.369)
Observations	57	57
R^2	0.964	0.981
Adjusted R ²	0.960	0.978
Residual Std. Error ($df = 50$)	0.192	0.112
F Statistic (df = 6; 50)	222.461***	* 423.945***

VAR(3) Model - Canada

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.347	-0.498**
	(0.406)	(0.216)
LGDP - Lag 1	1.455*	2.169***
	(0.758)	(0.403)
LGDS - Lag 2	0.701	0.730^{**}
	(0.585)	(0.311)
LGDP - Lag 2	-2.164*	-1.777***
	(1.183)	(0.629)
LGDS - Lag 3	-0.317	-0.209
	(0.352)	(0.187)
LGDP - Lag 3	0.947	0.563^{*}
	(0.625)	(0.333)
Constant	-0.063	0.276
	(0.441)	(0.235)
Observations	57	57
R^2	0.987	0.996
Adjusted R ²	0.986	0.996
Residual Std. Error ($df = 50$)	0.108	0.058
F Statistic (df = 6; 50)	655.465***	2,365.077***

VAR(3) Model - Central African Republic

	Dependent Variable	
	LGDS LGDP	
LGDS - Lag 1	0.411*** -0.003	
	(0.139) (0.019)	
LGDP - Lag 1	-0.214 0.919***	
	(1.013) (0.139)	
LGDS - Lag 2	-0.100 -0.021	
	(0.149) (0.021)	
LGDP - Lag 2	-0.138 0.079	
	(1.381) (0.190)	

LGDS - Lag 3	0.172 (0.141)	-0.016 (0.019)
LGDP - Lag 3	0.660 (0.979)	-0.046 (0.135)
Constant	-0.566 (1.250)	0.387** (0.172)
Observations	57	57
\mathbb{R}^2	0.277	0.951
Adjusted R ²	0.190	0.945
Residual Std. Error ($df = 50$)	0.949	0.131
F Statistic (df = 6; 50)	3.195***	161.489***

VAR(3) Model - Chad

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.527***	0.043**
	(0.147)	(0.021)
LGDP - Lag 1	0.438	1.204***
	(1.074)	(0.151)
LGDS - Lag 2	0.272^{*}	-0.034
	(0.153)	(0.022)
LGDP - Lag 2	1.517	-0.147
	(1.616)	(0.227)
LGDS - Lag 3	0.060	-0.009
	(0.151)	(0.021)
LGDP - Lag 3	-1.791*	-0.088
	(0.967)	(0.136)
Constant	-0.524	0.192
	(1.173)	(0.165)
Observations	57	57
\mathbb{R}^2	0.785	0.968
Adjusted R ²	0.759	0.964
Residual Std. Error ($df = 50$)	0.936	0.132
F Statistic (df = 6; 50)	30.452***	248.079***

VAR(3) Model - Chile

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.280	-0.213**
	(0.168)	(0.083)
LGDP - Lag 1	1.004***	1.426***
	(0.333)	(0.165)
LGDS - Lag 2	0.817***	0.466***
	(0.194)	(0.096)
LGDP - Lag 2	-1.691***	-1.067***
	(0.487)	(0.241)
LGDS - Lag 3	-0.128	0.001
	(0.203)	(0.100)
LGDP - Lag 3	0.686^{**}	0.305^{*}
	(0.336)	(0.167)
Constant	0.300	1.125***
	(0.690)	(0.342)
Observations	57	57
\mathbb{R}^2	0.961	0.985
Adjusted R ²	0.956	0.983
Residual Std. Error ($df = 50$)	0.273	0.135
F Statistic (df = 6; 50)	204.146***	541.059***

VAR(3) Model - China

	Dependen	Dependent Variable	
	LGDS	LGDP	
LGDS - Lag 1	1.802***	0.318	
	(0.406)	(0.243)	
LGDP - Lag 1	-0.697	0.793**	
	(0.556)	(0.332)	
LGDS - Lag 2	-1.424***	-0.379	
	(0.494)	(0.295)	
LGDP - Lag 2	1.537**	0.327	
	(0.709)	(0.423)	

LGDS - Lag 3	0.597**	0.144
	(0.276)	(0.165)
LGDP - Lag 3	-0.823*	-0.198
	(0.420)	(0.251)
Constant	0.090	0.126
	(0.355)	(0.212)
Observations	57	57
R^2	0.993	0.997
Adjusted R ²	0.993	0.997
Residual Std. Error ($df = 50$)	0.142	0.085
F Statistic ($df = 6; 50$)	1,271.578***	3,023.158***

VAR(3) Model - Colombia

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	1.007***	0.115
	(0.255)	(0.170)
LGDP - Lag 1	0.209	1.111***
	(0.388)	(0.258)
LGDS - Lag 2	0.225	0.075
	(0.344)	(0.229)
LGDP - Lag 2	-0.635	-0.251
	(0.559)	(0.372)
LGDS - Lag 3	-0.308	-0.117
	(0.241)	(0.161)
LGDP - Lag 3	0.484	0.055
	(0.347)	(0.231)
Constant	0.058	0.242
	(0.301)	(0.201)
Observations	57	57
\mathbb{R}^2	0.981	0.992
Adjusted R ²	0.979	0.991
Residual Std. Error ($df = 50$)	0.154	0.102
F Statistic (df = 6; 50)	438.298***	985.230***

VAR(3) Model - Congo, Rep.

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.741***	0.037
	(0.171)	(0.046)
LGDP - Lag 1	0.792	0.943***
	(0.661)	(0.179)
LGDS - Lag 2	-0.029	-0.008
	(0.193)	(0.052)
LGDP - Lag 2	-0.947	-0.039
	(0.857)	(0.232)
LGDS - Lag 3	-0.002	-0.017
	(0.155)	(0.042)
LGDP - Lag 3	0.635	0.035
	(0.613)	(0.166)
Constant	-1.623	0.389
	(1.525)	(0.413)
Observations	57	57
\mathbb{R}^2	0.893	0.964
Adjusted R ²	0.880	0.959
Residual Std. Error ($df = 50$)	0.640	0.173
F Statistic (df = 6; 50)	69.200***	220.196***

VAR(3) Model - Costa Rica

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.692***	-0.041
	(0.158)	(0.122)
LGDP - Lag 1	0.144	1.135***
	(0.207)	(0.160)
LGDS - Lag 2	-0.167	0.018
	(0.191)	(0.147)
LGDP - Lag 2	0.270	-0.211
	(0.300)	(0.232)

LGDS - Lag 3	0.248 (0.149)	0.047 (0.115)
LGDP - Lag 3	-0.175 (0.215)	0.041 (0.166)
Constant	-0.408 (0.301)	0.190 (0.232)
Observations	57	57
\mathbb{R}^2	0.985	0.990
Adjusted R ²	0.983	0.988
Residual Std. Error ($df = 50$)	0.150	0.116
F Statistic ($df = 6; 50$)	554.912***	799.995***

VAR(3) Model - Cote d'Ivoire

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	1.177***	0.160
	(0.166)	(0.099)
LGDP - Lag 1	-0.029	0.993***
	(0.272)	(0.162)
LGDS - Lag 2	-0.257	0.100
	(0.237)	(0.141)
LGDP - Lag 2	0.154	-0.158
	(0.380)	(0.227)
LGDS - Lag 3	-0.083	-0.182*
	(0.169)	(0.101)
LGDP - Lag 3	-0.040	0.067
	(0.241)	(0.143)
Constant	0.291	0.294^{*}
	(0.256)	(0.152)
Observations	57	57
R^2	0.912	0.974
Adjusted R ²	0.902	0.971
Residual Std. Error ($df = 50$)	0.178	0.106
F Statistic (df = 6; 50)	86.491***	308.656***

VAR(3) Model - Cuba

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.784***	0.012
	(0.148)	(0.049)
LGDP - Lag 1	0.986^{**}	1.317***
	(0.423)	(0.140)
LGDS - Lag 2	0.009	-0.083
	(0.191)	(0.063)
LGDP - Lag 2	-0.149	-0.449**
	(0.668)	(0.221)
LGDS - Lag 3	-0.090	0.094^{*}
	(0.143)	(0.047)
LGDP - Lag 3	-0.579	0.091
	(0.434)	(0.143)
Constant	-0.356	0.231**
	(0.299)	(0.099)
Observations	57	57
R^2	0.928	0.992
Adjusted R ²	0.920	0.992
Residual Std. Error ($df = 50$)	0.239	0.079
F Statistic ($df = 6$; 50)	107.812***	1,101.868***

VAR(3) Model - Cyprus

	Dependent	Dependent Variable	
	LGDS	LGDP	
LGDS - Lag 1	0.537	0.004	
	(0.528)	(0.208)	
LGDP - Lag 1	0.074	0.915^{*}	
	(1.330)	(0.525)	
LGDS - Lag 2	0.259	0.055	
	(0.556)	(0.219)	
LGDP - Lag 2	-0.473	-0.230	
	(1.723)	(0.680)	

LGDS - Lag 3	-0.280 (0.318)	-0.148 (0.125)
LGDP - Lag 3	0.798 (0.968)	0.366 (0.382)
Constant	0.069 (0.924)	0.266 (0.365)
Observations	57	57
\mathbb{R}^2	0.719	0.945
Adjusted R ²	0.686	0.939
Residual Std. Error ($df = 50$)	0.676	0.267
F Statistic (df = 6; 50)	21.359***	144.147***

VAR(3) Model - Denmark

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	1.260***	0.155
	(0.304)	(0.269)
LGDP - Lag 1	-0.155	1.052***
	(0.344)	(0.305)
LGDS - Lag 2	-0.344	0.050
	(0.439)	(0.389)
LGDP - Lag 2	-0.001	-0.422
	(0.514)	(0.456)
LGDS - Lag 3	0.064	-0.122
	(0.290)	(0.257)
LGDP - Lag 3	0.143	0.250
	(0.324)	(0.287)
Constant	0.362	0.534**
	(0.249)	(0.221)
Observations	57	57
R^2	0.993	0.994
Adjusted R ²	0.992	0.993
Residual Std. Error ($df = 50$)	0.105	0.093
F Statistic (df = 6; 50)	1,115.916***	* 1,318.071***

VAR(3) Model - Dominican Republic

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.600***	0.144
	(0.174)	(0.087)
LGDP - Lag 1	-0.115	0.626***
	(0.352)	(0.175)
LGDS - Lag 2	0.263	-0.012
	(0.187)	(0.093)
LGDP - Lag 2	0.269	0.213
	(0.408)	(0.203)
LGDS - Lag 3	0.089	0.050
	(0.170)	(0.085)
LGDP - Lag 3	-0.118	-0.081
	(0.308)	(0.154)
Constant	0.099	0.862^{**}
	(0.720)	(0.359)
Observations	57	57
\mathbb{R}^2	0.954	0.981
Adjusted R ²	0.949	0.979
Residual Std. Error ($df = 50$)	0.316	0.158
F Statistic ($df = 6; 50$)	174.733***	437.329***

VAR(3) Model - Ecuador

	Dependen	Dependent Variable	
	LGDS	LGDP	
LGDS - Lag 1	0.603***	0.059	
	(0.225)	(0.128)	
LGDP - Lag 1	0.529	1.321***	
	(0.379)	(0.216)	
LGDS - Lag 2	0.119	0.130	
	(0.237)	(0.135)	
LGDP - Lag 2	-0.279	-0.695**	
	(0.504)	(0.287)	

LGDS - Lag 3	-0.159 (0.206)	-0.140 (0.118)
LGDP - Lag 3	0.191 (0.319)	0.294 (0.182)
Constant	-0.648 (0.532)	0.345 (0.303)
Observations	57	57
\mathbb{R}^2	0.955	0.982
Adjusted R ²	0.949	0.980
Residual Std. Error ($df = 50$)	0.205	0.117
F Statistic ($df = 6; 50$)	175.248***	* 465.393***

VAR(3) Model - Egypt, Arab Rep.

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.867***	0.002
	(0.216)	(0.072)
LGDP - Lag 1	-0.020	1.135***
	(0.559)	(0.187)
LGDS - Lag 2	-0.677**	-0.060
	(0.272)	(0.091)
LGDP - Lag 2	0.117	-0.114
	(0.836)	(0.280)
LGDS - Lag 3	0.703**	0.101
	(0.321)	(0.107)
LGDP - Lag 3	-0.026	-0.074
	(0.605)	(0.203)
Constant	0.092	0.194
	(0.492)	(0.165)
Observations	57	57
\mathbb{R}^2	0.873	0.984
Adjusted R ²	0.858	0.982
Residual Std. Error ($df = 50$)	0.374	0.125
F Statistic (df = 6; 50)	57.456***	501.276***

VAR(3) Model - Eswatini

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.725***	0.036^{*}
	(0.147)	(0.021)
LGDP - Lag 1	-0.214	0.964***
	(1.018)	(0.145)
LGDS - Lag 2	0.102	-0.016
	(0.178)	(0.025)
LGDP - Lag 2	-1.048	-0.173
	(1.409)	(0.201)
LGDS - Lag 3	-0.063	0.029
	(0.144)	(0.020)
LGDP - Lag 3	1.354	0.142
	(0.968)	(0.138)
Constant	0.571	0.316**
	(0.882)	(0.126)
Observations	57	57
\mathbb{R}^2	0.600	0.984
Adjusted R ²	0.552	0.982
Residual Std. Error ($df = 50$)	0.944	0.135
F Statistic (df = 6 ; 50)	12.489***	516.935***

VAR(3) Model - Finland

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	1.620***	0.353
	(0.367)	(0.274)
LGDP - Lag 1	-0.439	0.955**
	(0.490)	(0.366)
LGDS - Lag 2	-0.722	-0.187
	(0.536)	(0.401)
LGDP - Lag 2	0.226	-0.397
	(0.740)	(0.553)

LGDS - Lag 3	0.143 (0.329)	0.019 (0.246)
LGDP - Lag 3	0.139 (0.430)	0.238 (0.321)
Constant	0.441* (0.246)	0.477** (0.184)
Observations	57	57
\mathbb{R}^2	0.987	0.993
Adjusted R ²	0.985	0.992
Residual Std. Error ($df = 50$)	0.130	0.097
F Statistic ($df = 6$; 50)	616.189***	1,227.215***

VAR(3) Model - France

	Depende	Dependent Variable	
	LGDS	LGDP	
LGDS - Lag 1	1.344***	0.227	
	(0.484)	(0.437)	
LGDP - Lag 1	-0.164	1.003**	
	(0.536)	(0.485)	
LGDS - Lag 2	-0.633	-0.283	
	(0.697)	(0.630)	
LGDP - Lag 2	0.339	-0.045	
	(0.788)	(0.713)	
LGDS - Lag 3	0.106	0.078	
	(0.462)	(0.418)	
LGDP - Lag 3	-0.036	-0.007	
	(0.501)	(0.453)	
Constant	0.214	0.340	
	(0.235)	(0.213)	
Observations	57	57	
R^2	0.989	0.992	
Adjusted R ²	0.987	0.991	
Residual Std. Error ($df = 50$)	0.105	0.095	
F Statistic (df = 6; 50)	718.543***	1,048.917***	

VAR(3) Model - Gabon

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.822***	0.046
	(0.197)	(0.094)
LGDP - Lag 1	0.652	1.043***
	(0.404)	(0.193)
LGDS - Lag 2	0.222	0.024
	(0.246)	(0.118)
LGDP - Lag 2	-1.046*	-0.335
	(0.537)	(0.258)
LGDS - Lag 3	-0.079	0.152
	(0.203)	(0.097)
LGDP - Lag 3	0.349	-0.090
	(0.369)	(0.177)
Constant	0.669	1.560***
	(0.886)	(0.424)
Observations	57	57
\mathbb{R}^2	0.950	0.975
Adjusted R ²	0.944	0.971
Residual Std. Error ($df = 50$)	0.348	0.167
F Statistic ($df = 6; 50$)	157.826***	318.923***

VAR(3) Model - Gambia, The

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.353**	-0.006
	(0.141)	(0.019)
LGDP - Lag 1	-0.432	0.984***
	(1.062)	(0.143)
LGDS - Lag 2	-0.096	-0.004
	(0.149)	(0.020)
LGDP - Lag 2	1.274	0.026
	(1.494)	(0.201)

LGDS - Lag 3	-0.112 (0.141)	0.008 (0.019)
LGDP - Lag 3	-0.112 (1.054)	-0.050 (0.141)
Constant	-2.315 (1.579)	0.262 (0.212)
Observations	57	57
\mathbb{R}^2	0.280	0.940
Adjusted R ²	0.193	0.933
Residual Std. Error ($df = 50$)	1.360	0.182
F Statistic (df = 6; 50)	3.235***	130.227***

VAR(3) Model - Germany

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	1.374***	0.419
	(0.400)	(0.334)
LGDP - Lag 1	-0.216	0.832^{**}
	(0.482)	(0.403)
LGDS - Lag 2	-0.887	-0.760
	(0.544)	(0.455)
LGDP - Lag 2	0.537	0.416
	(0.681)	(0.569)
LGDS - Lag 3	0.390	0.288
	(0.381)	(0.318)
LGDP - Lag 3	-0.227	-0.225
	(0.438)	(0.366)
Constant	0.162	0.256
	(0.228)	(0.190)
Observations	57	57
R^2	0.990	0.993
Adjusted R ²	0.988	0.992
Residual Std. Error ($df = 50$)	0.116	0.097
F Statistic (df = 6; 50)	787.443***	1,134.243***

VAR(3) Model - Ghana

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.402***	0.036
	(0.133)	(0.030)
LGDP - Lag 1	-0.296	1.137***
	(0.635)	(0.144)
LGDS - Lag 2	-0.044	-0.063*
	(0.142)	(0.032)
LGDP - Lag 2	-0.153	-0.150
	(0.952)	(0.216)
LGDS - Lag 3	0.350^{**}	0.020
	(0.136)	(0.031)
LGDP - Lag 3	0.998	0.018
	(0.651)	(0.147)
Constant	-2.203**	0.030
	(0.862)	(0.195)
Observations	57	57
R^2	0.646	0.961
Adjusted R ²	0.604	0.956
Residual Std. Error ($df = 50$)	0.680	0.154
F Statistic ($df = 6; 50$)	15.230***	203.866***

VAR(3) Model - Greece

Dependent Variable	
LGDS	LGDP
0.898***	0.066
(0.229)	(0.136)
0.225	1.278***
(0.397)	(0.235)
0.126	0.087
(0.281)	(0.167)
-0.501	-0.544
(0.583)	(0.346)
	LGDS 0.898*** (0.229) 0.225 (0.397) 0.126 (0.281) -0.501

LGDS - Lag 3	-0.099 (0.187)	-0.077 (0.111)
LGDP - Lag 3	0.276 (0.333)	0.180 (0.198)
Constant	0.590*** (0.179)	0.276** (0.106)
Observations	57	57
\mathbb{R}^2	0.974	0.995
Adjusted R ²	0.971	0.994
Residual Std. Error ($df = 50$)	0.142	0.084
F Statistic ($df = 6; 50$)	309.577***	1,537.148***

VAR(3) Model - Guatemala

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.433***	-0.007
	(0.145)	(0.056)
LGDP - Lag 1	0.912**	1.261***
	(0.379)	(0.147)
LGDS - Lag 2	0.310^{*}	0.005
	(0.156)	(0.060)
LGDP - Lag 2	-0.518	-0.199
	(0.592)	(0.230)
LGDS - Lag 3	0.025	-0.002
	(0.140)	(0.054)
LGDP - Lag 3	-0.325	-0.069
	(0.393)	(0.153)
Constant	0.548^{**}	0.105
	(0.248)	(0.096)
Observations	57	57
\mathbb{R}^2	0.864	0.991
Adjusted R ²	0.848	0.990
Residual Std. Error ($df = 50$)	0.211	0.082
F Statistic ($df = 6; 50$)	52.976***	957.770***

VAR(3) Model - Honduras

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.859***	-0.0002
	(0.141)	(0.038)
LGDP - Lag 1	0.310	1.273***
	(0.535)	(0.144)
LGDS - Lag 2	-0.291	-0.011
	(0.185)	(0.050)
LGDP - Lag 2	-0.714	-0.110
	(0.873)	(0.235)
LGDS - Lag 3	0.190	-0.009
	(0.141)	(0.038)
LGDP - Lag 3	0.513	-0.172
	(0.524)	(0.141)
Constant	0.405	0.179^{*}
	(0.389)	(0.105)
Observations	57	57
\mathbb{R}^2	0.767	0.988
Adjusted R ²	0.739	0.987
Residual Std. Error ($df = 50$)	0.329	0.088
F Statistic ($df = 6; 50$)	27.493***	697.664***

VAR(3) Model - Hong Kong SAR, China

	Dependen	Dependent Variable	
	LGDS	LGDP	
LGDS - Lag 1	0.950***	0.015	
	(0.263)	(0.132)	
LGDP - Lag 1	0.300	1.425***	
	(0.524)	(0.262)	
LGDS - Lag 2	-0.187	-0.058	
	(0.312)	(0.156)	
LGDP - Lag 2	-0.064	-0.383	
	(0.796)	(0.399)	

LGDS - Lag 3	0.144 (0.202)	0.075 (0.101)
LGDP - Lag 3	-0.177 (0.426)	-0.090 (0.213)
Constant	0.243 (0.276)	0.224 (0.138)
Observations	57	57
\mathbb{R}^2	0.993	0.998
Adjusted R ²	0.992	0.998
Residual Std. Error ($df = 50$)	0.130	0.065
F Statistic ($df = 6; 50$)	1,132.743***	4,478.348***

VAR(3) Model - Iceland

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	1.216***	0.406
	(0.279)	(0.253)
LGDP - Lag 1	0.190	1.112***
	(0.299)	(0.271)
LGDS - Lag 2	-0.764**	-0.695**
	(0.366)	(0.332)
LGDP - Lag 2	0.082	-0.191
	(0.390)	(0.354)
LGDS - Lag 3	0.409	0.300
	(0.297)	(0.269)
LGDP - Lag 3	-0.173	0.041
	(0.287)	(0.260)
Constant	0.231	0.333^{*}
	(0.184)	(0.167)
Observations	57	57
\mathbb{R}^2	0.983	0.989
Adjusted R ²	0.981	0.987
Residual Std. Error ($df = 50$)	0.135	0.122
F Statistic (df = 6; 50)	492.808***	727.105***

VAR(3) Model - India

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	1.121***	0.167
	(0.179)	(0.100)
LGDP - Lag 1	0.111	0.833***
	(0.336)	(0.188)
LGDS - Lag 2	-0.381	-0.119
	(0.241)	(0.135)
LGDP - Lag 2	-0.294	0.073
	(0.429)	(0.240)
LGDS - Lag 3	0.241	0.009
	(0.185)	(0.104)
LGDP - Lag 3	0.201	0.018
	(0.334)	(0.187)
Constant	0.069	0.261
	(0.566)	(0.317)
Observations	57	57
\mathbb{R}^2	0.989	0.992
Adjusted R ²	0.987	0.991
Residual Std. Error ($df = 50$)	0.154	0.086
F Statistic (df = 6; 50)	724.061***	* 1,053.183***

VAR(3) Model - Indonesia

	Dependent Variable
	LGDS LGDP
LGDS - Lag 1	1.048*** 0.140
	(0.245) (0.167)
LGDP - Lag 1	0.223 0.784***
	(0.347) (0.237)
LGDS - Lag 2	0.208 0.406**
	(0.293) (0.201)
LGDP - Lag 2	-0.914** -0.594**
	(0.381) (0.260)

LGDS - Lag 3	-0.217 (0.220)	-0.392** (0.151)
LGDP - Lag 3	0.604* (0.315)	0.600*** (0.215)
Constant	0.459 (0.634)	0.649 (0.433)
Observations	57	57
\mathbb{R}^2	0.969	0.973
Adjusted R ²	0.965	0.969
Residual Std. Error ($df = 50$)	0.311	0.213
F Statistic ($df = 6; 50$)	261.593***	* 295.816***

VAR(3) Model - Iran, Islamic Rep.

	Dependen	Dependent Variable	
	LGDS	LGDP	
LGDS - Lag 1	0.686***	0.037	
	(0.186)	(0.110)	
LGDP - Lag 1	0.588^{*}	1.080***	
	(0.306)	(0.181)	
LGDS - Lag 2	0.098	-0.138	
	(0.237)	(0.140)	
LGDP - Lag 2	-0.781*	0.001	
	(0.420)	(0.248)	
LGDS - Lag 3	0.294	0.260^{**}	
	(0.196)	(0.116)	
LGDP - Lag 3	-0.025	-0.330*	
	(0.293)	(0.173)	
Constant	1.229***	0.925***	
	(0.432)	(0.255)	
Observations	57	57	
\mathbb{R}^2	0.959	0.979	
Adjusted R ²	0.954	0.977	
Residual Std. Error ($df = 50$)	0.256	0.151	
F Statistic (df = 6; 50)	196.482***	394.084***	

VAR(3) Model - Iraq

Dependent Variable	
LGDS	LGDP
0.531**	-0.115
(0.230)	(0.108)
-0.296	0.890^{***}
(0.496)	(0.233)
0.105	0.105
(0.282)	(0.132)
0.395	-0.001
(0.694)	(0.325)
0.233	0.055
(0.213)	(0.100)
-0.144	-0.012
(0.476)	(0.223)
1.256	0.707^{*}
(0.766)	(0.359)
57	57
0.712	0.905
0.678	0.894
0.707	0.332
20.627***	79.614***
	LGDS 0.531** (0.230) -0.296 (0.496) 0.105 (0.282) 0.395 (0.694) 0.233 (0.213) -0.144 (0.476) 1.256 (0.766) 57 0.712 0.678

VAR(3) Model - Ireland

	Depender	Dependent Variable	
	LGDS	LGDP	
LGDS - Lag 1	0.837***	-0.067	
	(0.171)	(0.084)	
LGDP - Lag 1	-0.108	1.334***	
	(0.351)	(0.173)	
LGDS - Lag 2	-0.097	0.118	
	(0.223)	(0.110)	
LGDP - Lag 2	0.496	-0.456	
	(0.566)	(0.278)	

LGDS - Lag 3	0.143 (0.161)	-0.057 (0.079)
LGDP - Lag 3	-0.242 (0.350)	0.117 (0.172)
Constant	-0.308 (0.279)	0.158 (0.137)
Observations	57	57
\mathbb{R}^2	0.991	0.997
Adjusted R ²	0.989	0.996
Residual Std. Error ($df = 50$)	0.181	0.089
F Statistic ($df = 6$; 50)	879.318***	2,390.906***

VAR(3) Model - Israel

	Depende	Dependent Variable	
	LGDS	LGDP	
LGDS - Lag 1	0.427***	0.016	
	(0.149)	(0.071)	
LGDP - Lag 1	-0.251	0.879^{***}	
	(0.278)	(0.132)	
LGDS - Lag 2	0.103	0.013	
	(0.156)	(0.074)	
LGDP - Lag 2	0.377	-0.001	
	(0.366)	(0.174)	
LGDS - Lag 3	0.266^{*}	0.025	
	(0.142)	(0.067)	
LGDP - Lag 3	0.078	0.038	
	(0.279)	(0.132)	
Constant	-0.199	0.447^{**}	
	(0.440)	(0.209)	
Observations	57	57	
R^2	0.976	0.993	
Adjusted R ²	0.973	0.992	
Residual Std. Error ($df = 50$)	0.201	0.096	
F Statistic (df = 6; 50)	336.915***	* 1,146.154***	

VAR(3) Model - Italy

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	1.371***	0.557
	(0.428)	(0.399)
LGDP - Lag 1	-0.185	0.685
	(0.465)	(0.433)
LGDS - Lag 2	-0.807	-0.781
	(0.562)	(0.523)
LGDP - Lag 2	0.408	0.446
	(0.620)	(0.577)
LGDS - Lag 3	0.045	0.141
	(0.419)	(0.390)
LGDP - Lag 3	0.102	-0.083
	(0.431)	(0.401)
Constant	0.090	0.265
	(0.246)	(0.229)
Observations	57	57
\mathbb{R}^2	0.992	0.994
Adjusted R ²	0.991	0.993
Residual Std. Error ($df = 50$)	0.100	0.093
F Statistic (df = 6; 50)	976.974***	1,366.542***

VAR(3) Model - Jamaica

	Dependent Variable
	LGDS LGDP
LGDS - Lag 1	0.626*** -0.004
	(0.143) (0.033)
LGDP - Lag 1	0.385 1.072***
	(0.623) (0.142)
LGDS - Lag 2	-0.046 0.030
	(0.168) (0.038)
LGDP - Lag 2	-0.991 -0.308
	(0.897) (0.204)

LGDS - Lag 3	0.103 (0.142)	0.006 (0.032)
LGDP - Lag 3	0.635 (0.609)	0.203 (0.139)
Constant	1.541* (0.895)	0.124 (0.204)
Observations	57	57
\mathbb{R}^2	0.429	0.976
Adjusted R ²	0.361	0.973
Residual Std. Error ($df = 50$)	0.542	0.123
F Statistic (df = 6; 50)	6.269***	336.634***

VAR(3) Model - Japan

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	1.002***	-0.060
	(0.197)	(0.115)
LGDP - Lag 1	0.189	1.249***
	(0.334)	(0.195)
LGDS - Lag 2	0.179	0.256
	(0.288)	(0.168)
LGDP - Lag 2	-0.591	-0.675**
	(0.496)	(0.289)
LGDS - Lag 3	-0.185	-0.103
	(0.195)	(0.113)
LGDP - Lag 3	0.346	0.282
	(0.306)	(0.178)
Constant	0.638**	0.686***
	(0.318)	(0.185)
Observations	57	57
R^2	0.989	0.996
Adjusted R ²	0.988	0.995
Residual Std. Error ($df = 50$)	0.156	0.091
F Statistic (df = 6; 50)	767.724***	1,849.266***

VAR(3) Model - Korea, Rep.

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.564**	0.026
	(0.246)	(0.147)
LGDP - Lag 1	0.685	1.088***
	(0.414)	(0.247)
LGDS - Lag 2	0.469^{**}	0.228^{*}
	(0.210)	(0.125)
LGDP - Lag 2	-1.511***	-0.797***
	(0.414)	(0.247)
LGDS - Lag 3	-0.068	-0.049
	(0.139)	(0.083)
LGDP - Lag 3	0.803***	0.432***
	(0.245)	(0.147)
Constant	0.611	0.977***
	(0.442)	(0.264)
Observations	57	57
R^2	0.993	0.996
Adjusted R ²	0.992	0.996
Residual Std. Error ($df = 50$)	0.195	0.116
F Statistic ($df = 6$; 50)	1,176.285***	2,260.340***

VAR(3) Model - Kuwait

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.694**	0.104
	(0.303)	(0.194)
LGDP - Lag 1	0.155	0.745**
	(0.465)	(0.298)
LGDS - Lag 2	0.820**	0.445**
	(0.338)	(0.217)
LGDP - Lag 2	-1.216**	-0.674*
	(0.557)	(0.357)

LGDS - Lag 3	-0.555*	-0.421**
	(0.294)	(0.188)
LGDP - Lag 3	0.846^{*}	0.614^{**}
	(0.432)	(0.277)
Constant	2.446**	1.968***
	(1.120)	(0.719)
Observations	57	57
\mathbb{R}^2	0.768	0.837
Adjusted R ²	0.740	0.817
Residual Std. Error ($df = 50$)	0.779	0.500
F Statistic (df = 6; 50)	27.623***	42.685***

VAR(3) Model - Luxembourg

	Depende	Dependent Variable	
	LGDS	LGDP	
LGDS - Lag 1	0.485*	-0.204	
	(0.272)	(0.173)	
LGDP - Lag 1	1.040**	1.642***	
	(0.429)	(0.273)	
LGDS - Lag 2	0.549	0.366^{*}	
	(0.342)	(0.218)	
LGDP - Lag 2	-1.470**	-1.075***	
	(0.618)	(0.394)	
LGDS - Lag 3	-0.170	-0.104	
	(0.269)	(0.171)	
LGDP - Lag 3	0.565	0.349	
	(0.407)	(0.259)	
Constant	-0.038	0.378	
	(0.496)	(0.316)	
Observations	57	57	
R^2	0.989	0.994	
Adjusted R ²	0.988	0.994	
Residual Std. Error ($df = 50$)	0.156	0.099	
F Statistic (df = 6; 50)	782.225***	1,457.983***	

VAR(3) Model - Madagascar

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.340**	-0.054**
	(0.141)	(0.022)
LGDP - Lag 1	1.819^{*}	0.982***
	(0.927)	(0.144)
LGDS - Lag 2	0.124	0.031
	(0.158)	(0.025)
LGDP - Lag 2	-1.094	0.061
	(1.272)	(0.198)
LGDS - Lag 3	0.064	0.003
	(0.139)	(0.022)
LGDP - Lag 3	0.411	-0.055
	(0.992)	(0.154)
Constant	-4.910**	0.164
	(2.390)	(0.372)
Observations	57	57
\mathbb{R}^2	0.689	0.913
Adjusted R ²	0.651	0.902
Residual Std. Error ($df = 50$)	0.817	0.127
F Statistic ($df = 6; 50$)	18.419***	87.157***

VAR(3) Model - Malawi

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.341**	0.045**
	(0.141)	(0.022)
LGDP - Lag 1	0.630	0.800^{***}
	(0.852)	(0.134)
LGDS - Lag 2	0.280^{*}	0.026
	(0.142)	(0.022)
LGDP - Lag 2	-1.589	-0.079
	(1.097)	(0.172)

LGDS - Lag 3	0.118 (0.139)	-0.058** (0.022)
LGDP - Lag 3	1.007 (0.814)	0.224* (0.128)
Constant	0.400 (1.378)	0.297 (0.216)
Observations	57	57
\mathbb{R}^2	0.538	0.940
Adjusted R ²	0.482	0.933
Residual Std. Error ($df = 50$)	1.066	0.167
F Statistic (df = 6; 50)	9.697***	131.383***

VAR(3) Model - Malaysia

	Depende	Dependent Variable	
	LGDS	LGDP	
LGDS - Lag 1	0.539**	-0.187	
	(0.267)	(0.170)	
LGDP - Lag 1	0.665	1.468***	
	(0.431)	(0.274)	
LGDS - Lag 2	-0.016	0.022	
	(0.340)	(0.216)	
LGDP - Lag 2	-0.402	-0.491	
	(0.625)	(0.397)	
LGDS - Lag 3	0.580^{**}	0.253	
	(0.258)	(0.164)	
LGDP - Lag 3	-0.429	-0.105	
	(0.413)	(0.263)	
Constant	0.674	0.453	
	(0.463)	(0.294)	
Observations	57	57	
R^2	0.987	0.993	
Adjusted R ²	0.985	0.992	
Residual Std. Error ($df = 50$)	0.167	0.106	
F Statistic (df = 6; 50)	626.811***	* 1,131.002***	

VAR(3) Model - Mali

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.464***	-0.009
	(0.143)	(0.030)
LGDP - Lag 1	0.515	0.938***
	(0.685)	(0.143)
LGDS - Lag 2	0.208	-0.006
	(0.155)	(0.032)
LGDP - Lag 2	0.089	0.122
	(0.928)	(0.194)
LGDS - Lag 3	0.096	0.018
	(0.142)	(0.030)
LGDP - Lag 3	-0.216	-0.077
	(0.694)	(0.145)
Constant	-1.557	0.120
	(1.093)	(0.229)
Observations	57	57
\mathbb{R}^2	0.698	0.942
Adjusted R ²	0.661	0.935
Residual Std. Error ($df = 50$)	0.974	0.204
F Statistic ($df = 6; 50$)	19.220***	134.886***

VAR(3) Model - Malta

	Dependent Variable
	LGDS LGDP
LGDS - Lag 1	0.541** -0.027
	(0.263) (0.083)
LGDP - Lag 1	1.086 1.107***
	(0.861) (0.272)
LGDS - Lag 2	0.025 -0.056
	(0.305) (0.096)
LGDP - Lag 2	0.261 0.075
	(1.101) (0.348)

LGDS - Lag 3	-0.061 (0.255)	-0.019 (0.081)
LGDP - Lag 3	-0.722 (0.834)	-0.064 (0.264)
Constant	-1.989** (0.810)	-0.281 (0.256)
Observations	57	57
R^2	0.904	0.981
Adjusted R ²	0.892	0.978
Residual Std. Error ($df = 50$)	0.500	0.158
F Statistic ($df = 6$; 50)	78.158***	419.087***

VAR(3) Model - Mauritania

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.923***	0.0004
	(0.147)	(0.018)
LGDP - Lag 1	-0.796	1.242***
	(1.145)	(0.143)
LGDS - Lag 2	-0.193	0.001
	(0.196)	(0.024)
LGDP - Lag 2	1.557	-0.391*
	(1.620)	(0.202)
LGDS - Lag 3	0.122	0.003
	(0.145)	(0.018)
LGDP - Lag 3	-0.544	0.105
	(0.954)	(0.119)
Constant	-0.756	0.309^{*}
	(1.246)	(0.156)
Observations	57	57
R^2	0.776	0.975
Adjusted R ²	0.750	0.972
Residual Std. Error ($df = 50$)	0.821	0.102
F Statistic (df = 6; 50)	28.932***	324.817***

VAR(3) Model - Mauritius

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.533**	-0.103
	(0.243)	(0.130)
LGDP - Lag 1	0.445	1.276***
	(0.450)	(0.242)
LGDS - Lag 2	0.581^{*}	0.302^{*}
	(0.302)	(0.163)
LGDP - Lag 2	-0.900	-0.548
	(0.672)	(0.361)
LGDS - Lag 3	-0.026	-0.133
	(0.236)	(0.127)
LGDP - Lag 3	0.312	0.186
	(0.424)	(0.228)
Constant	0.659^{*}	0.342
	(0.389)	(0.209)
Observations	57	57
R^2	0.971	0.990
Adjusted R ²	0.968	0.989
Residual Std. Error ($df = 50$)	0.290	0.156
F Statistic ($df = 6$; 50)	282.722***	833.668***

VAR(3) Model - Mexico

	Dependen	Dependent Variable	
	LGDS	LGDP	
LGDS - Lag 1	0.690**	-0.133	
	(0.303)	(0.258)	
LGDP - Lag 1	0.439	1.352***	
	(0.336)	(0.286)	
LGDS - Lag 2	0.033	-0.306	
	(0.384)	(0.326)	
LGDP - Lag 2	-0.493	-0.358	
	(0.450)	(0.382)	

LGDS - Lag 3	-0.107 (0.296)	0.252 (0.252)
LGDP - Lag 3	0.411 (0.335)	0.165 (0.285)
Constant	-0.289 (0.338)	0.018 (0.287)
	(0.336)	(0.267)
Observations	57	57
R^2	0.980	0.984
Adjusted R ²	0.977	0.982
Residual Std. Error ($df = 50$)	0.160	0.136
F Statistic ($df = 6; 50$)	400.768***	519.258***

VAR(3) Model - Morocco

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.521**	-0.231**
	(0.208)	(0.103)
LGDP - Lag 1	0.529	1.514***
	(0.422)	(0.210)
LGDS - Lag 2	0.090	0.214^{*}
	(0.253)	(0.126)
LGDP - Lag 2	0.168	-0.499
	(0.658)	(0.327)
LGDS - Lag 3	0.157	0.049
	(0.192)	(0.095)
LGDP - Lag 3	-0.449	-0.079
	(0.417)	(0.207)
Constant	-0.448	0.315
	(0.585)	(0.291)
Observations	57	57
R^2	0.978	0.991
Adjusted R ²	0.975	0.990
Residual Std. Error ($df = 50$)	0.179	0.089
F Statistic (df = 6; 50)	370.806***	* 930.312***

 $VAR(3)\ Model\ \textbf{-}\ Netherlands$

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.673*	-0.217
	(0.370)	(0.346)
LGDP - Lag 1	0.579	1.506***
	(0.397)	(0.371)
LGDS - Lag 2	0.607	0.555
	(0.493)	(0.460)
LGDP - Lag 2	-1.021*	-1.018*
	(0.555)	(0.519)
LGDS - Lag 3	-0.229	-0.124
	(0.385)	(0.360)
LGDP - Lag 3	0.361	0.266
	(0.402)	(0.376)
Constant	0.404	0.630^{*}
	(0.339)	(0.317)
Observations	57	57
\mathbb{R}^2	0.993	0.994
Adjusted R ²	0.993	0.993
Residual Std. Error ($df = 50$)	0.097	0.090
F Statistic (df = 6; 50)	1,249.333***	1,395.983***

VAR(3) Model - New Zealand

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	1.174***	0.314
	(0.302)	(0.226)
LGDP - Lag 1	-0.231	0.844***
	(0.411)	(0.306)
LGDS - Lag 2	0.313	0.155
	(0.384)	(0.287)
LGDP - Lag 2	-0.592	-0.509
	(0.560)	(0.418)

LGDS - Lag 3	-0.274	-0.222
	(0.259)	(0.193)
LGDP - Lag 3	0.560^{*}	0.383
	(0.333)	(0.249)
Constant	0.860^{**}	0.749^{**}
	(0.403)	(0.301)
Observations	57	57
R^2	0.985	0.989
Adjusted R ²	0.983	0.988
Residual Std. Error ($df = 50$)	0.143	0.107
F Statistic (df = 6; 50)	550.385***	771.052***

VAR(3) Model - Niger

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.505***	0.035
	(0.177)	(0.031)
LGDP - Lag 1	1.521	1.041***
	(1.005)	(0.177)
LGDS - Lag 2	-0.150	-0.016
	(0.192)	(0.034)
LGDP - Lag 2	-0.266	-0.139
	(1.356)	(0.239)
LGDS - Lag 3	-0.127	-0.024
	(0.167)	(0.029)
LGDP - Lag 3	0.107	0.048
	(0.889)	(0.157)
Constant	-5.429 ^{**}	0.313
	(2.436)	(0.430)
Observations	57	57
\mathbb{R}^2	0.588	0.903
Adjusted R ²	0.539	0.891
Residual Std. Error ($df = 50$)	0.789	0.139
F Statistic (df = 6; 50)	11.902***	77.670***

VAR(3) Model - Norway

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.652**	-0.315
	(0.310)	(0.215)
LGDP - Lag 1	0.918^{**}	1.738***
	(0.442)	(0.306)
LGDS - Lag 2	0.003	0.381
	(0.424)	(0.293)
LGDP - Lag 2	-0.757	-0.930**
	(0.652)	(0.452)
LGDS - Lag 3	0.074	-0.085
	(0.311)	(0.216)
LGDP - Lag 3	0.101	0.191
	(0.433)	(0.300)
Constant	-0.168	0.229
	(0.425)	(0.294)
Observations	57	57
R^2	0.992	0.996
Adjusted R ²	0.991	0.995
Residual Std. Error ($df = 50$)	0.124	0.086
F Statistic ($df = 6; 50$)	1,012.066***	1,894.984***

VAR(3) Model - Oman

	Dependent Variabl	Dependent Variable	
	LGDS LGDP		
LGDS - Lag 1	0.930*** 0.122		
	(0.282) (0.174)	1	
LGDP - Lag 1	0.219 0.939***	*	
	(0.456) (0.281)	ı	
LGDS - Lag 2	-0.051 -0.116		
	(0.346) (0.213)	ı	
LGDP - Lag 2	-0.534 -0.144		
	(0.585) (0.360)	J	

LGDS - Lag 3	0.160 (0.247)	0.194 (0.152)
LGDP - Lag 3	0.187 (0.397)	-0.055 (0.244)
Constant	0.882** (0.408)	0.775*** (0.252)
Observations	57	57
\mathbb{R}^2	0.949	0.978
Adjusted R ²	0.943	0.975
Residual Std. Error ($df = 50$)	0.385	0.237
F Statistic (df = 6; 50)	154.900***	363.100***

VAR(3) Model - Pakistan

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.904***	0.004
	(0.158)	(0.086)
LGDP - Lag 1	0.061	1.089***
	(0.281)	(0.153)
LGDS - Lag 2	-0.154	0.014
	(0.205)	(0.112)
LGDP - Lag 2	0.170	-0.339
	(0.405)	(0.221)
LGDS - Lag 3	0.130	-0.020
	(0.155)	(0.085)
LGDP - Lag 3	-0.176	0.234
	(0.288)	(0.157)
Constant	0.161	0.152
	(0.286)	(0.156)
Observations	57	57
\mathbb{R}^2	0.945	0.984
Adjusted R ²	0.938	0.982
Residual Std. Error ($df = 50$)	0.194	0.106
F Statistic (df = 6 ; 50)	142.641***	509.872***

VAR(3) Model - Panama

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.263	-0.021
	(0.157)	(0.036)
LGDP - Lag 1	4.895***	1.699***
	(0.664)	(0.151)
LGDS - Lag 2	0.346**	0.032
	(0.138)	(0.031)
LGDP - Lag 2	-5.332***	-0.827***
	(1.255)	(0.286)
LGDS - Lag 3	-0.007	-0.004
	(0.130)	(0.030)
LGDP - Lag 3	0.833	0.117
	(0.874)	(0.199)
Constant	-0.671**	0.069
	(0.330)	(0.075)
Observations	57	57
R^2	0.966	0.998
Adjusted R ²	0.962	0.998
Residual Std. Error ($df = 50$)	0.199	0.045
F Statistic ($df = 6$; 50)	237.307***	3,834.527***

VAR(3) Model - Papua New Guinea

	Dependent Variable
	LGDS LGDP
LGDS - Lag 1	0.568*** 0.008
	(0.145) (0.032)
LGDP - Lag 1	1.180 1.320***
	(0.709) (0.154)
LGDS - Lag 2	-0.151 -0.017
	(0.160) (0.035)
LGDP - Lag 2	-0.960 -0.333
	(1.104) (0.240)

LGDS - Lag 3	0.312** (0.133)	0.014 (0.029)
LGDP - Lag 3	0.176 (0.682)	-0.020 (0.149)
Constant	-1.224 (1.215)	0.233 (0.265)
Observations	57	57
\mathbb{R}^2	0.890	0.981
Adjusted R ²	0.877	0.978
Residual Std. Error ($df = 50$)	0.579	0.126
F Statistic (df = 6; 50)	67.542***	423.769***

VAR(3) Model - Paraguay

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	1.142***	0.203
	(0.157)	(0.137)
LGDP - Lag 1	-0.086	0.847***
	(0.214)	(0.186)
LGDS - Lag 2	-0.042	0.092
	(0.215)	(0.187)
LGDP - Lag 2	-0.101	-0.190
	(0.279)	(0.242)
LGDS - Lag 3	0.087	0.036
	(0.172)	(0.149)
LGDP - Lag 3	-0.085	-0.085
	(0.201)	(0.174)
Constant	0.950^{**}	1.240***
	(0.450)	(0.390)
Observations	57	57
\mathbb{R}^2	0.981	0.978
Adjusted R ²	0.979	0.975
Residual Std. Error ($df = 50$)	0.182	0.158
F Statistic (df = 6; 50)	429.946***	367.773***

VAR(3) Model - Peru

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	1.148***	0.133
	(0.202)	(0.135)
LGDP - Lag 1	-0.439	0.821***
	(0.293)	(0.196)
LGDS - Lag 2	-0.034	0.122
	(0.286)	(0.191)
LGDP - Lag 2	0.377	0.070
	(0.430)	(0.287)
LGDS - Lag 3	-0.338*	-0.287**
	(0.193)	(0.129)
LGDP - Lag 3	0.261	0.116
	(0.290)	(0.194)
Constant	-0.089	0.185
	(0.233)	(0.156)
Observations	57	57
\mathbb{R}^2	0.960	0.982
Adjusted R ²	0.955	0.980
Residual Std. Error ($df = 50$)	0.187	0.125
F Statistic ($df = 6; 50$)	201.378***	459.768***

VAR(3) Model - Philippines

	Dependen	Dependent Variable	
	LGDS	LGDP	
LGDS - Lag 1	1.086***	0.140	
	(0.212)	(0.160)	
LGDP - Lag 1	0.064	1.020***	
	(0.253)	(0.190)	
LGDS - Lag 2	-0.511*	-0.293	
	(0.291)	(0.219)	
LGDP - Lag 2	0.590^{*}	0.185	
	(0.342)	(0.257)	

LGDS - Lag 3	0.317 (0.211)	0.177 (0.159)
LGDP - Lag 3	-0.587**	-0.239
	(0.245)	(0.184)
Constant	0.125	0.143
	(0.144)	(0.109)
Observations	57	57
\mathbb{R}^2	0.979	0.991
Adjusted R ²	0.976	0.989
Residual Std. Error ($df = 50$)	0.121	0.091
F Statistic (df = 6; 50)	385.594***	* 877.468***

VAR(3) Model - Portugal

	Depende	Dependent Variable	
	LGDS	LGDP	
LGDS - Lag 1	1.371***	0.230	
	(0.213)	(0.138)	
LGDP - Lag 1	-0.320	1.104***	
	(0.337)	(0.218)	
LGDS - Lag 2	-0.823***	-0.241	
	(0.288)	(0.186)	
LGDP - Lag 2	0.574	-0.146	
	(0.517)	(0.334)	
LGDS - Lag 3	0.275	0.084	
	(0.197)	(0.127)	
LGDP - Lag 3	-0.123	-0.044	
	(0.303)	(0.196)	
Constant	0.172	0.274^{**}	
	(0.170)	(0.110)	
Observations	57	57	
R^2	0.985	0.995	
Adjusted R ²	0.983	0.995	
Residual Std. Error ($df = 50$)	0.144	0.093	
F Statistic (df = 6; 50)	549.797***	1,708.399***	

VAR(3) Model - Rwanda

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.298^{*}	0.024
	(0.152)	(0.038)
LGDP - Lag 1	1.038^{*}	0.750***
	(0.610)	(0.150)
LGDS - Lag 2	0.300**	0.022
	(0.149)	(0.037)
LGDP - Lag 2	-0.649	0.239
	(0.724)	(0.179)
LGDS - Lag 3	0.015	-0.008
	(0.147)	(0.036)
LGDP - Lag 3	0.142	-0.073
	(0.586)	(0.145)
Constant	-1.976 [*]	0.426
	(1.054)	(0.260)
Observations	57	57
R^2	0.761	0.960
Adjusted R ²	0.733	0.956
Residual Std. Error ($df = 50$)	0.767	0.189
F Statistic (df = 6; 50)	26.581***	201.534***

VAR(3) Model - Saudi Arabia

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	1.424***	0.352
	(0.407)	(0.224)
LGDP - Lag 1	-0.824	0.387
	(0.736)	(0.405)
LGDS - Lag 2	-0.132	-0.182
	(0.515)	(0.284)
LGDP - Lag 2	0.133	0.245
	(0.925)	(0.509)

LGDS - Lag 3	-0.059 (0.339)	0.087 (0.186)
LGDP - Lag 3	0.305 (0.630)	0.009 (0.347)
Constant	1.702*** (0.594)	1.255*** (0.327)
Observations	57	57
\mathbb{R}^2	0.943	0.976
Adjusted R ²	0.936	0.973
Residual Std. Error ($df = 50$)	0.392	0.216
F Statistic ($df = 6; 50$)	138.264***	339.827***

VAR(3) Model - Senegal

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.681***	0.095**
	(0.143)	(0.037)
LGDP - Lag 1	-0.430	1.154***
	(0.535)	(0.140)
LGDS - Lag 2	0.143	-0.111**
	(0.175)	(0.046)
LGDP - Lag 2	0.437	-0.303
	(0.784)	(0.206)
LGDS - Lag 3	0.116	0.058
	(0.157)	(0.041)
LGDP - Lag 3	0.038	0.101
	(0.509)	(0.134)
Constant	0.008	0.165
	(0.761)	(0.200)
Observations	57	57
\mathbb{R}^2	0.680	0.957
Adjusted R ²	0.642	0.952
Residual Std. Error ($df = 50$)	0.408	0.107
F Statistic (df = 6; 50)	17.717***	185.864***

VAR(3) Model - Singapore

	Dependen	Dependent Variable	
	LGDS	LGDP	
LGDS - Lag 1	0.623***	-0.035	
	(0.228)	(0.157)	
LGDP - Lag 1	0.908^{**}	1.460***	
	(0.387)	(0.266)	
LGDS - Lag 2	-0.076	0.004	
	(0.118)	(0.081)	
LGDP - Lag 2	-0.531	-0.628**	
	(0.379)	(0.260)	
LGDS - Lag 3	0.221***	0.068^{*}	
	(0.057)	(0.039)	
LGDP - Lag 3	-0.143	0.097	
	(0.202)	(0.139)	
Constant	-0.131	0.419^{*}	
	(0.337)	(0.231)	
Observations	57	57	
\mathbb{R}^2	0.997	0.998	
Adjusted R ²	0.997	0.998	
Residual Std. Error ($df = 50$)	0.110	0.076	
F Statistic ($df = 6; 50$)	3,085.293***	3,878.286***	

VAR(3) Model - South Africa

	Dependent Variable
	LGDS LGDP
LGDS - Lag 1	1.382*** 0.368
	(0.324) (0.269)
LGDP - Lag 1	-0.152 0.941***
	(0.386) (0.321)
LGDS - Lag 2	-0.613 -0.352
	(0.453) (0.377)
LGDP - Lag 2	0.048 -0.263
	(0.545) (0.454)

LGDS - Lag 3	0.123 (0.314)	-0.003 (0.261)
LGDP - Lag 3	0.143 (0.359)	0.275 (0.299)
Constant	0.419** (0.186)	0.323** (0.154)
Observations	57	57
\mathbb{R}^2	0.955	0.980
Adjusted R ²	0.950	0.978
Residual Std. Error ($df = 50$)	0.137	0.114
F Statistic (df = 6; 50)	176.495***	417.683***

VAR(3) Model - Spain

	Depender	Dependent Variable	
	LGDS	LGDP	
LGDS - Lag 1	1.998***	0.805*	
	(0.493)	(0.438)	
LGDP - Lag 1	-0.917	0.444	
	(0.565)	(0.502)	
LGDS - Lag 2	-0.281	-0.250	
	(0.724)	(0.643)	
LGDP - Lag 2	0.181	-0.006	
	(0.855)	(0.759)	
LGDS - Lag 3	-0.723	-0.472	
	(0.432)	(0.384)	
LGDP - Lag 3	0.709	0.454	
	(0.481)	(0.427)	
Constant	0.353	0.392^{*}	
	(0.232)	(0.206)	
Observations	57	57	
R^2	0.993	0.995	
Adjusted R ²	0.992	0.994	
Residual Std. Error ($df = 50$)	0.107	0.095	
F Statistic (df = 6; 50)	1,106.904***	* 1,568.818***	

VAR(3) Model - Sweden

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	1.087**	-0.076
	(0.439)	(0.357)
LGDP - Lag 1	0.051	1.353***
	(0.547)	(0.445)
LGDS - Lag 2	-0.210	0.233
	(0.630)	(0.513)
LGDP - Lag 2	-0.295	-0.788
	(0.837)	(0.681)
LGDS - Lag 3	0.110	-0.067
	(0.390)	(0.317)
LGDP - Lag 3	0.219	0.314
	(0.488)	(0.397)
Constant	0.414	0.484^{*}
	(0.316)	(0.257)
Observations	57	57
\mathbb{R}^2	0.985	0.990
Adjusted R ²	0.983	0.989
Residual Std. Error ($df = 50$)	0.122	0.099
F Statistic (df = 6; 50)	535.175***	826.385***

VAR(3) Model - Switzerland

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	1.530***	0.402
	(0.373)	(0.312)
LGDP - Lag 1	-0.433	0.761**
	(0.446)	(0.372)
LGDS - Lag 2	-0.390	-0.058
	(0.538)	(0.450)
LGDP - Lag 2	0.157	-0.279
	(0.638)	(0.533)

LGDS - Lag 3	-0.053 (0.368)	-0.051 (0.307)
LGDP - Lag 3	0.154 (0.411)	0.189 (0.343)
Constant	0.506 (0.396)	0.765** (0.331)
Observations	57	57
\mathbb{R}^2	0.992	0.994
Adjusted R ²	0.991	0.993
Residual Std. Error ($df = 50$)	0.111	0.093
F Statistic ($df = 6; 50$)	1,008.338***	1,364.991***

VAR(3) Model - Syrian Arab Republic

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.647***	0.064
	(0.218)	(0.101)
LGDP - Lag 1	0.415	0.962^{***}
	(0.481)	(0.223)
LGDS - Lag 2	0.096	0.005
	(0.251)	(0.116)
LGDP - Lag 2	0.224	0.021
	(0.630)	(0.292)
LGDS - Lag 3	0.164	0.032
	(0.210)	(0.098)
LGDP - Lag 3	-0.546	-0.145
	(0.429)	(0.199)
Constant	-0.111	0.671
	(0.916)	(0.425)
Observations	57	57
\mathbb{R}^2	0.930	0.968
Adjusted R ²	0.922	0.965
Residual Std. Error ($df = 50$)	0.392	0.182
F Statistic (df = 6; 50)	111.046***	255.037***

VAR(3) Model - Thailand

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.992***	0.159
	(0.248)	(0.155)
LGDP - Lag 1	0.371	1.220***
	(0.400)	(0.249)
LGDS - Lag 2	-0.037	-0.130
	(0.311)	(0.194)
LGDP - Lag 2	-0.558	-0.399
	(0.543)	(0.338)
LGDS - Lag 3	-0.247	-0.133
	(0.248)	(0.155)
LGDP - Lag 3	0.499	0.284
	(0.359)	(0.224)
Constant	-0.433	-0.079
	(0.305)	(0.190)
Observations	57	57
\mathbb{R}^2	0.992	0.996
Adjusted R ²	0.991	0.996
Residual Std. Error ($df = 50$)	0.133	0.083
F Statistic (df = 6; 50)	1,045.656***	2,162.155***

VAR(3) Model - Togo

	Dependent Variable
	LGDS LGDP
LGDS - Lag 1	0.515*** 0.015
	(0.152) (0.025)
LGDP - Lag 1	-0.199 1.188***
	(0.893) (0.150)
LGDS - Lag 2	0.146 -0.025
	(0.166) (0.028)
LGDP - Lag 2	-0.357 -0.367
	(1.345) (0.226)

LGDS - Lag 3	-0.050 (0.147)	0.008 (0.025)
LGDP - Lag 3	0.602 (0.840)	0.127 (0.141)
Constant	1.148 (1.002)	0.338* (0.168)
Observations	57	57
\mathbb{R}^2	0.335	0.956
Adjusted R ²	0.256	0.950
Residual Std. Error ($df = 50$)	0.717	0.121
F Statistic (df = 6; 50)	4.206***	179.026***

VAR(3) Model - Tunisia

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.778***	0.024
	(0.216)	(0.061)
LGDP - Lag 1	0.883^{*}	1.268***
	(0.510)	(0.143)
LGDS - Lag 2	-0.152	-0.091
	(0.270)	(0.076)
LGDP - Lag 2	-0.479	-0.170
	(0.795)	(0.223)
LGDS - Lag 3	-0.022	0.132**
	(0.216)	(0.060)
LGDP - Lag 3	-0.079	-0.184
	(0.505)	(0.142)
Constant	-0.106	0.283***
	(0.341)	(0.096)
Observations	57	57
\mathbb{R}^2	0.914	0.994
Adjusted R ²	0.904	0.994
Residual Std. Error ($df = 50$)	0.266	0.074
F Statistic (df = 6; 50)	89.053***	1,479.519***

VAR(3) Model - Turkey

	Depender	Dependent Variable	
	LGDS	LGDP	
LGDS - Lag 1	0.463*	-0.173	
	(0.257)	(0.202)	
LGDP - Lag 1	0.420	1.166***	
	(0.324)	(0.254)	
LGDS - Lag 2	0.381	0.215	
	(0.311)	(0.244)	
LGDP - Lag 2	-0.345	-0.197	
	(0.433)	(0.340)	
LGDS - Lag 3	-0.147	-0.220	
	(0.263)	(0.206)	
LGDP - Lag 3	0.167	0.157	
	(0.314)	(0.246)	
Constant	0.131	0.227	
	(0.185)	(0.145)	
Observations	57	57	
\mathbb{R}^2	0.965	0.983	
Adjusted R ²	0.960	0.981	
Residual Std. Error ($df = 50$)	0.193	0.151	
F Statistic (df = 6; 50)	227.531***	490.190***	

VAR(3) Model - Uganda

	Depender	Dependent Variable	
	LGDS	LGDP	
LGDS - Lag 1	0.861***	0.084**	
	(0.126)	(0.035)	
LGDP - Lag 1	0.112	1.123***	
	(0.511)	(0.142)	
LGDS - Lag 2	-0.386**	-0.075	
	(0.164)	(0.046)	
LGDP - Lag 2	1.218	-0.136	
	(0.752)	(0.209)	

LGDS - Lag 3	0.395*** (0.132)	0.023 (0.037)
LGDP - Lag 3	-1.237**	-0.081
Constant	(0.474)	(0.132) 0.457**
	(0.758)	(0.211)
Observations	57	57
\mathbb{R}^2	0.785	0.939
Adjusted R ²	0.759	0.932
Residual Std. Error ($df = 50$)	0.639	0.178
F Statistic (df = 6; 50)	30.348***	128.223***

VAR(3) Model - United Kingdom

	Depende	Dependent Variable	
	LGDS	LGDP	
LGDS - Lag 1	1.022***	0.032	
	(0.171)	(0.091)	
LGDP - Lag 1	0.244	1.334***	
	(0.317)	(0.169)	
LGDS - Lag 2	-0.126	0.013	
	(0.241)	(0.128)	
LGDP - Lag 2	-0.551	-0.631**	
	(0.488)	(0.260)	
LGDS - Lag 3	-0.173	-0.145	
	(0.174)	(0.092)	
LGDP - Lag 3	0.541^{*}	0.361**	
	(0.307)	(0.163)	
Constant	-0.056	0.199^{*}	
	(0.189)	(0.101)	
Observations	57	57	
R^2	0.982	0.995	
Adjusted R ²	0.980	0.995	
Residual Std. Error ($df = 50$)	0.152	0.081	
F Statistic (df = 6; 50)	447.270***	1,806.392***	

VAR(3) Model - United States

	Depender	Dependent Variable	
	LGDS	LGDP	
LGDS - Lag 1	1.091***	0.081	
	(0.193)	(0.063)	
LGDP - Lag 1	0.512	1.143***	
	(0.615)	(0.200)	
LGDS - Lag 2	-0.352	-0.044	
	(0.236)	(0.077)	
LGDP - Lag 2	-0.390	-0.205	
	(0.818)	(0.266)	
LGDS - Lag 3	0.136	0.035	
	(0.159)	(0.052)	
LGDP - Lag 3	-0.021	-0.019	
	(0.508)	(0.165)	
Constant	0.048	0.256***	
	(0.254)	(0.083)	
Observations	57	57	
\mathbb{R}^2	0.996	1.000	
Adjusted R ²	0.995	1.000	
Residual Std. Error ($df = 50$)	0.058	0.019	
F Statistic ($df = 6; 50$)	1,977.333***	1,977.333*** 21,247.200***	

VAR(3) Model - Uruguay

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.161	-0.028
	(0.171)	(0.075)
LGDP - Lag 1	0.784^{*}	1.321***
	(0.396)	(0.173)
LGDS - Lag 2	0.210	0.180^{**}
	(0.166)	(0.073)
LGDP - Lag 2	0.082	-0.531**
	(0.556)	(0.244)

LGDS - Lag 3	-0.339* (0.169)	-0.137* (0.074)
LGDP - Lag 3	0.114 (0.367)	0.176 (0.161)
Constant	-1.789** (0.688)	0.222 (0.301)
Observations	57	57
R^2	0.890	0.975
Adjusted R ²	0.877	0.972
Residual Std. Error ($df = 50$)	0.402	0.176
F Statistic (df = 6; 50)	67.645***	327.063***

VAR(3) Model - Venezuela, RB

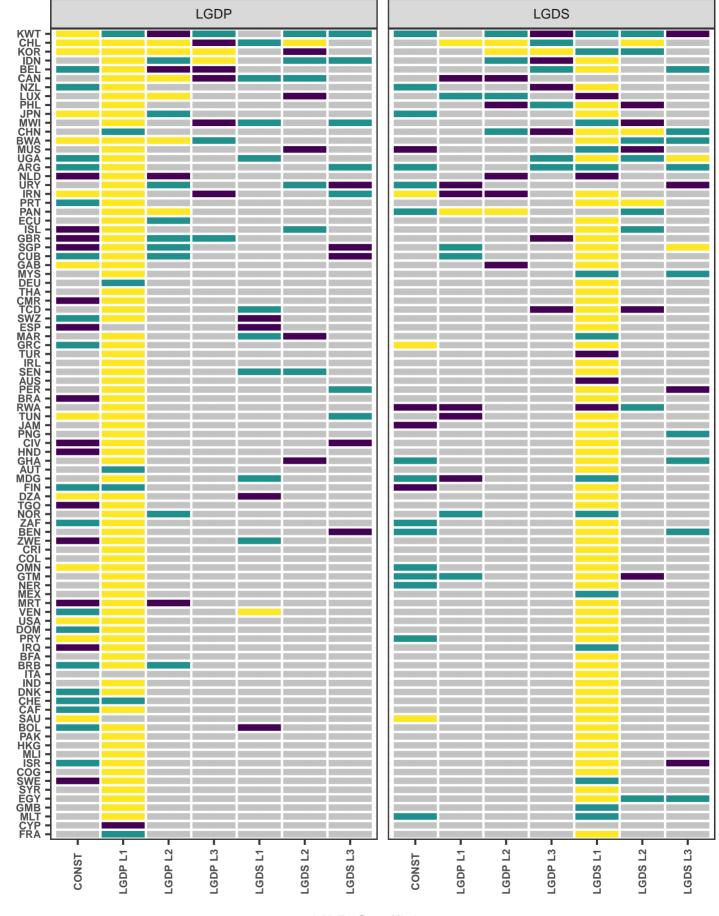
	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.787***	0.285***
	(0.162)	(0.089)
LGDP - Lag 1	0.048	0.542***
	(0.295)	(0.162)
LGDS - Lag 2	-0.041	-0.027
	(0.197)	(0.108)
LGDP - Lag 2	0.144	0.278
	(0.327)	(0.180)
LGDS - Lag 3	0.156	-0.0002
	(0.179)	(0.098)
LGDP - Lag 3	-0.168	-0.098
	(0.247)	(0.136)
Constant	0.494	0.541**
	(0.485)	(0.267)
Observations	57	57
R^2	0.872	0.960
Adjusted R ²	0.857	0.955
Residual Std. Error ($df = 50$)	0.309	0.170
F Statistic (df = 6 ; 50)	56.827***	199.156***

VAR(3) Model - Zimbabwe

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.637***	-0.054**
	(0.159)	(0.027)
LGDP - Lag 1	0.637	1.270***
	(0.946)	(0.159)
LGDS - Lag 2	0.0005	0.030
	(0.208)	(0.035)
LGDP - Lag 2	-1.341	-0.316
	(1.487)	(0.250)
LGDS - Lag 3	0.163	-0.011
	(0.178)	(0.030)
LGDP - Lag 3	0.880	-0.015
	(0.965)	(0.162)
Constant	-0.318	0.547^{*}
	(1.636)	(0.275)
Observations	57	57
\mathbb{R}^2	0.562	0.921
Adjusted R ²	0.510	0.912
Residual Std. Error ($df = 50$)	0.853	0.143
F Statistic ($df = 6$; 50)	10.704***	97.478***

VAR(3) Models by Country

Regression Equations for LGDP and LGDS

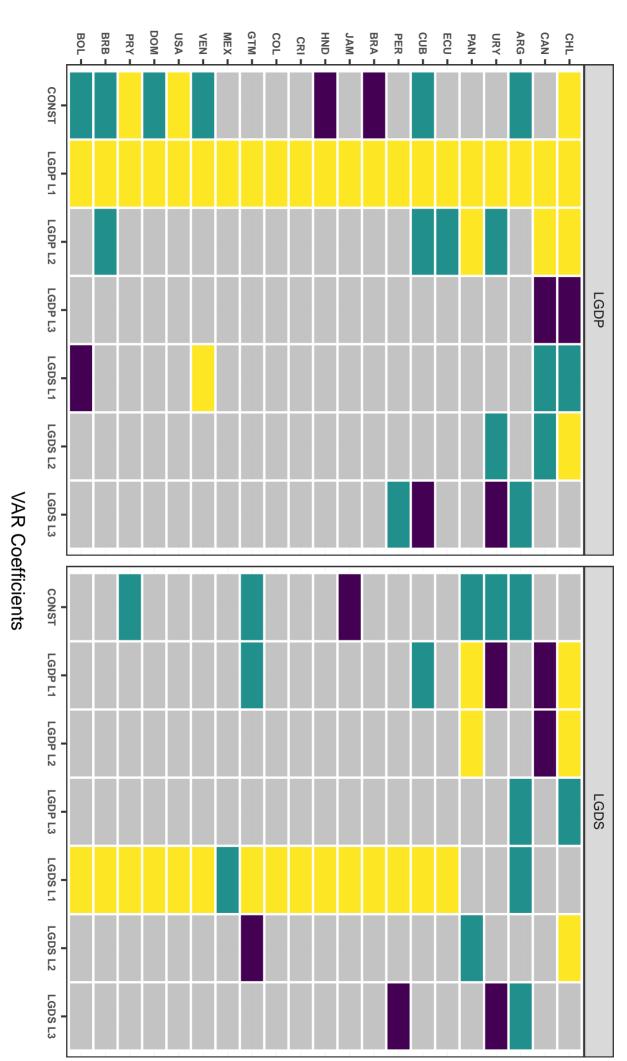


VAR Coefficients

Significance of VAR Coefficients

p < 0.01 p < 0.05 p < 0.1

Country Code



p<0.01 p<0.05 p<0.1

Significance of VAR Coefficients

Regression Equations for LGDP and LGDS

VAR(3) Models by Country (Americas)

Country Code PNG -MYS-SGP -PAK -CHN -AUS: - AHT 뫈 ND. JPN -NZL -IDN -CONST LGDP L1 LGDP L2 LGDP L3 LGDP LGDS L1 LGDS L2 LGDS L3 CONST LGDP L1 LGDP L2 LGDP L3 LGDS LGDS L1 LGDS L2 LGDS L3

p < 0.01 p < 0.05 p < 0.1

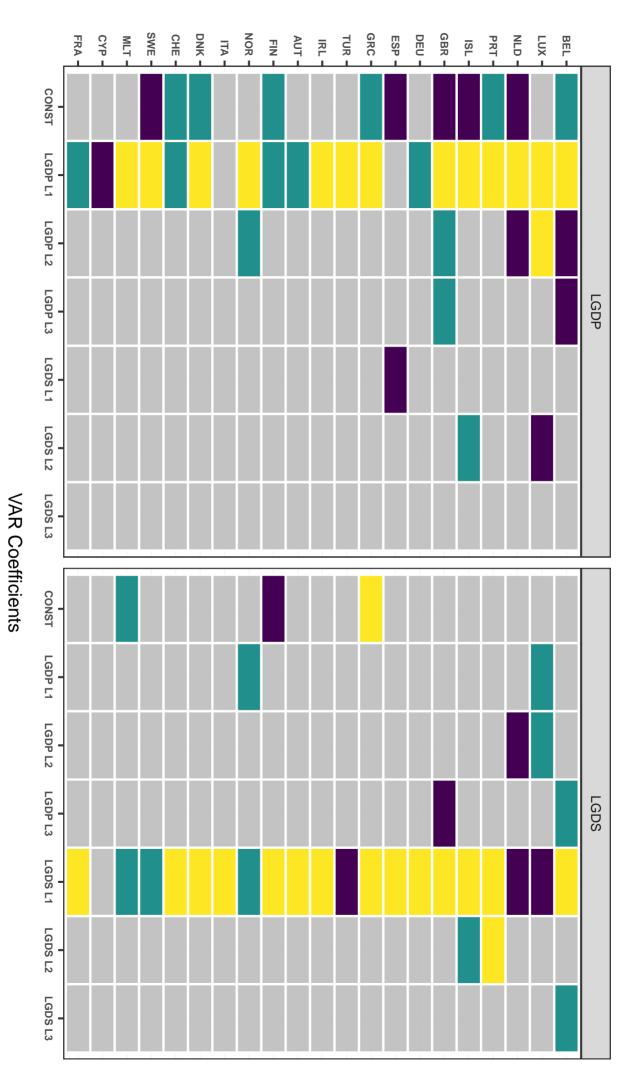
Significance of VAR Coefficients

VAR Coefficients

VAR(3) Models by Country (Asia-Pacific)

Regression Equations for LGDP and LGDS

Country Code



p<0.01 p<0.05 p<0.1

Significance of VAR Coefficients

VAR(3) Models by Country (Europe)
Regression Equations for LGDP and LGDS

OMN -KWT -MAR -SAU -DZA -NUT IRQ -RN -VAR(3) Models by Country (Middle East and North Africa) LGDP Regression Equations for LGDP and LGDS

LGDS

Country Code

p<0.01 p<0.05 p<0.1 Significance of VAR Coefficients

EGY -

CONST

LGDP L1

LGDP L2 LGDP L3

LGDS L1

LGDS L2

LGDS L3

CONST

LGDP L1

LGDP L2 LGDP L3

LGDS L1

LGDS L2

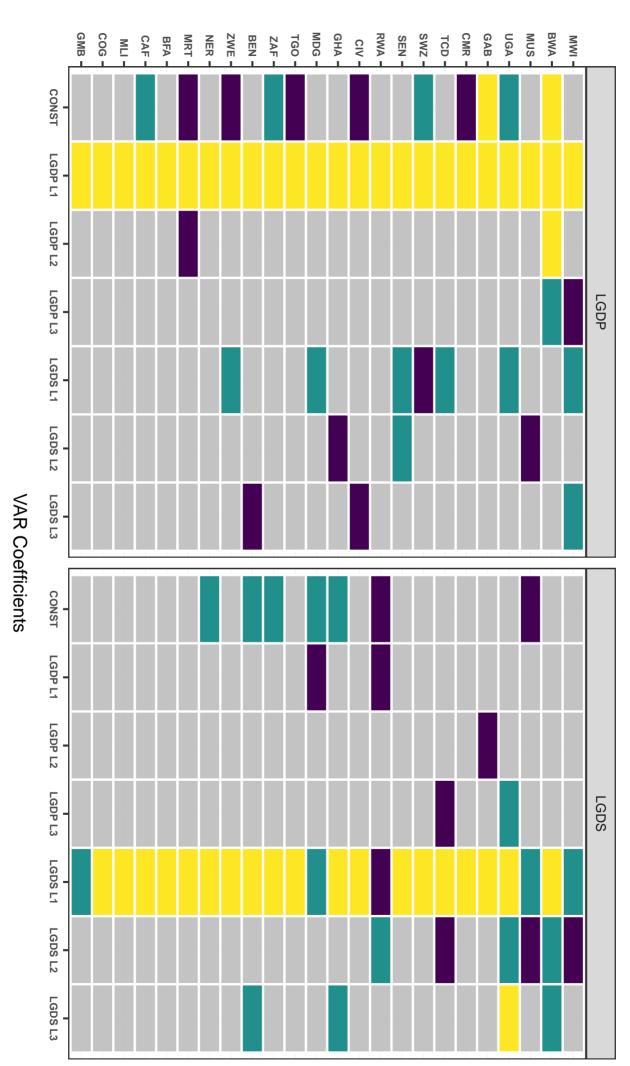
LGDS L3

VAR Coefficients

SYR -

ISR

VAR(3) Models by Country (Sub-Saharan Africa) Regression Equations for LGDP and LGDS



p < 0.01 p < 0.05 p < 0.1

Significance of VAR Coefficients

VAR(3) Granger Causality Tests

Testing Bidirectional Causation

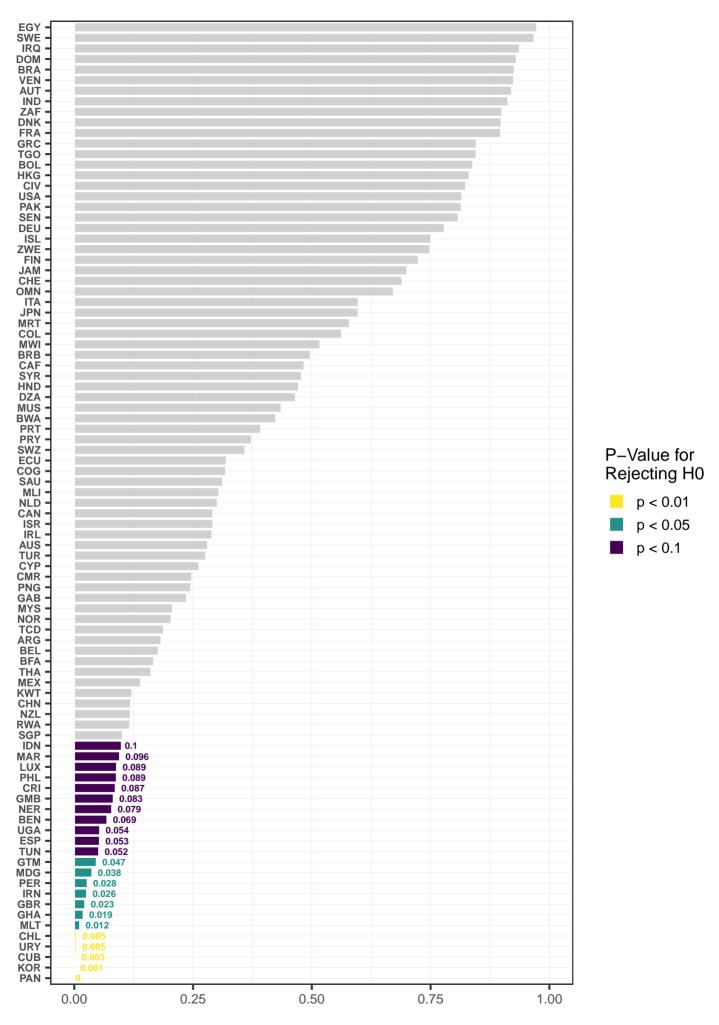


P-Value for Rejecting H0

p < 0.01 p < 0.05 p < 0.1

VAR(3) Granger Causality Tests

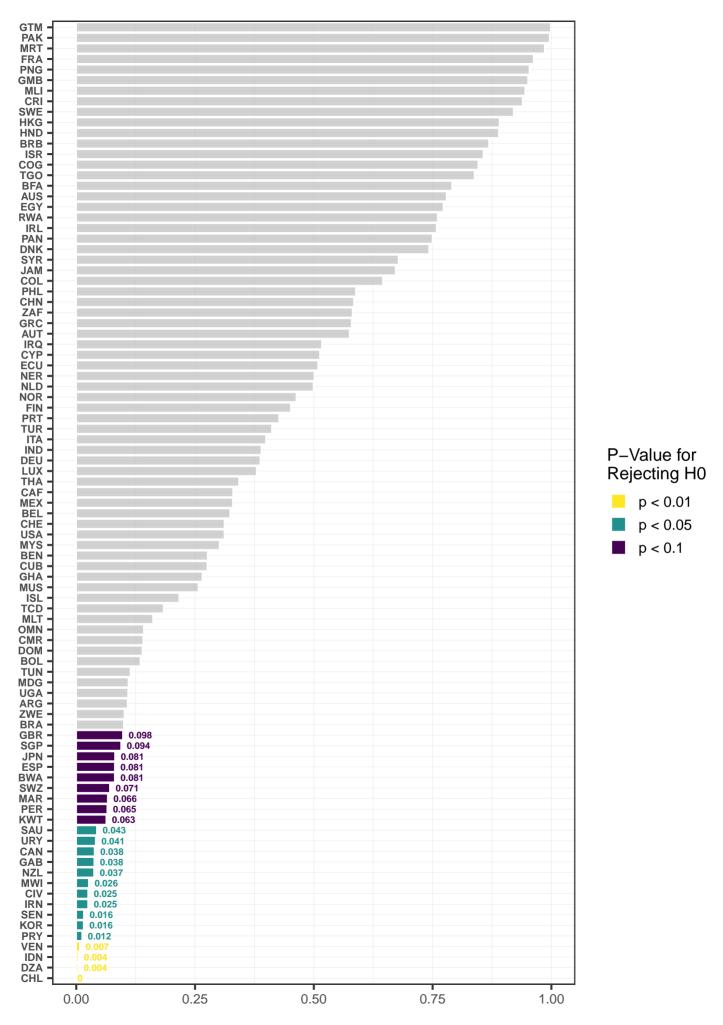
H0: LGDP does not cause LGDS



Granger Test P-Value

VAR(3) Granger Causality Tests

H0: LGDS does not cause LGDP



Granger Test P-Value

LGDS LGDP -5.0% 10.0% --5.0%· 0.0% 5.0% 0.0% 5.0% -VAR(3) Orthogonal Impulse Response (DZA) VAR(3) Orthogonal Impulse Response (DZA) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 10.0% 20.0% 15.0% 5.0% 0.0% 20% 30% -10% 0% VAR(3) Orthogonal Impulse Response (DZA) VAR(3) Orthogonal Impulse Response (DZA) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS LGDP -10.0% -5.0% -10% 0.0% 5.0% • 10% 0% VAR(3) Orthogonal Impulse Response (ARG) VAR(3) Orthogonal Impulse Response (ARG) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS **LGDP** 10.0% -20.0% -15.0% 5.0% 0.0% 10% -20% -0% VAR(3) Orthogonal Impulse Response (ARG) VAR(3) Orthogonal Impulse Response (ARG) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS **LGDP** 3.0% 6.0% 0.0% 5.0% 0.0% 2.5% 7.5% VAR(3) Orthogonal Impulse Response (AUS) 0.0 0.0 Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS **LGDP** 15.0% 10.0% 10.0% -0.0% 5.0% 0.0% 5.0% VAR(3) Orthogonal Impulse Response (AUS) 0.0 0.0 Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

VAR(3) Orthogonal Impulse Response (AUS)

VAR(3) Orthogonal Impulse Response (AUS)

Response to Shock in LGDS (95% CI)

Response to Shock in LGDP (95% CI)

LGDS LGDP -5.0% -4.0% 0.0% 0.0% 4.0% 8.0% 5.0% VAR(3) Orthogonal Impulse Response (AUT) VAR(3) Orthogonal Impulse Response (AUT) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 10.0% 15.0% 15.0% 10.0% 0.0% 5.0% 5.0% 0.0% VAR(3) Orthogonal Impulse Response (AUT) VAR(3) Orthogonal Impulse Response (AUT) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS LGDP 10.0% 10.0% -5.0% -15.0% 0.0% 5.0% 5.0% 0.0% VAR(3) Orthogonal Impulse Response (BRB) VAR(3) Orthogonal Impulse Response (BRB) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP -5.0%10.0% 5.0% 0.0% 10% 20% 30% -0% VAR(3) Orthogonal Impulse Response (BRB) VAR(3) Orthogonal Impulse Response (BRB) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS LGDP -5.0% 10.0% --5.0%0.0% 0.0% 5.0% 5.0% -VAR(3) Orthogonal Impulse Response (BEL) VAR(3) Orthogonal Impulse Response (BEL) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 10.0% 15.0% 15.0% 10.0% 0.0% 5.0% 0.0% 5.0% VAR(3) Orthogonal Impulse Response (BEL) VAR(3) Orthogonal Impulse Response (BEL) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS LGDP 10.0% -**−10%** · 5.0% 0.0% 10% 20% -30% -0% VAR(3) Orthogonal Impulse Response (BEN) VAR(3) Orthogonal Impulse Response (BEN) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS **LGDP** -5.0% 100% 0.0% 5.0% 50% 25% 75% 0% VAR(3) Orthogonal Impulse Response (BEN) VAR(3) Orthogonal Impulse Response (BEN) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS LGDP -10.0% -5.0% -2.0%0.0% 0.0% 5.0% 2.0% 4.0% -6.0% VAR(3) Orthogonal Impulse Response (BOL) VAR(3) Orthogonal Impulse Response (BOL) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 10.0% -15.0% 20.0% -5.0% 0.0% 10% 20% 30% -0% VAR(3) Orthogonal Impulse Response (BOL) VAR(3) Orthogonal Impulse Response (BOL) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS LGDP -10.0% -20.0%20.0% -10.0% 10.0% -0.0% 5.0% 0.0% VAR(3) Orthogonal Impulse Response (BWA) VAR(3) Orthogonal Impulse Response (BWA) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS **LGDP** 10.0% 15.0% -5.0% 0.0% 40% -60% -20% 0% VAR(3) Orthogonal Impulse Response (BWA) VAR(3) Orthogonal Impulse Response (BWA) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS LGDP -10.0% -10.0% -5.0% -5.0%· 10.0% -0.0% 5.0% 0.0% 5.0% VAR(3) Orthogonal Impulse Response (BRA) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS **LGDP** 10.0% -10.0% 15.0% 20.0% -25.0% -15.0% -20.0% -5.0% 5.0% 0.0% 0.0% VAR(3) Orthogonal Impulse Response (BRA) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

VAR(3) Orthogonal Impulse Response (BRA)

VAR(3) Orthogonal Impulse Response (BRA)

LGDS LGDP -10.0% 30.0% -10.0% 20.0% 15.0% -10.0% 0.0% 5.0% 0.0% VAR(3) Orthogonal Impulse Response (BFA) VAR(3) Orthogonal Impulse Response (BFA) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP -10.0% -5.0% 0.0% 5.0% -25% 50% 75% -VAR(3) Orthogonal Impulse Response (BFA) VAR(3) Orthogonal Impulse Response (BFA) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS LGDP -5.0% -5.0% -10.0% -10.0% -0.0% 5.0% 0.0% 5.0% -VAR(3) Orthogonal Impulse Response (CMR) VAR(3) Orthogonal Impulse Response (CMR) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 20.0% • 10.0% 15.0% 10.0% 15.0% 5.0% 0.0% 0.0% 5.0% VAR(3) Orthogonal Impulse Response (CMR) VAR(3) Orthogonal Impulse Response (CMR) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS LGDP -2.5%5.0% -2.0% -0.0% 0.0% 6.0% 2.5% -4.0% VAR(3) Orthogonal Impulse Response (CAN) VAR(3) Orthogonal Impulse Response (CAN) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 10.0% 0.0% 5.0% 6.0% 9.0% 0.0% 3.0% VAR(3) Orthogonal Impulse Response (CAN) VAR(3) Orthogonal Impulse Response (CAN) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS LGDP -10.0% -30.0% -20.0% 20.0% -10.0% 10.0% 15.0% 0.0% 5.0% 0.0% VAR(3) Orthogonal Impulse Response (CAF) VAR(3) Orthogonal Impulse Response (CAF) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP -5.0% 0.0% 80% 40% 0% VAR(3) Orthogonal Impulse Response (CAF) VAR(3) Orthogonal Impulse Response (CAF) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS LGDP 10.0% -15.0% -25.0% 20.0% 5.0% 0.0% 20% 40% -0% VAR(3) Orthogonal Impulse Response (TCD) VAR(3) Orthogonal Impulse Response (TCD) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 100% 50% 25% 75% 10% 0% 0% VAR(3) Orthogonal Impulse Response (TCD) VAR(3) Orthogonal Impulse Response (TCD) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS LGDP -10% 20% -10% 10% 0% 0% VAR(3) Orthogonal Impulse Response (CHL) VAR(3) Orthogonal Impulse Response (CHL) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDP **LGDS** 20.0% 10.0% 15.0% 0.0% 5.0% 30% 10% 0% VAR(3) Orthogonal Impulse Response (CHL) VAR(3) Orthogonal Impulse Response (CHL) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS LGDP -3.0% **-**-5.0% 3.0% 0.0% 5.0% -0.0% 6.0% VAR(3) Orthogonal Impulse Response (CHN) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 10.0% 15.0% 20.0% 5.0% 0.0% 20% 30% 10% 0% VAR(3) Orthogonal Impulse Response (CHN) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

VAR(3) Orthogonal Impulse Response (CHN)

VAR(3) Orthogonal Impulse Response (CHN)

LGDS LGDP -5.0% 10.0% --5.0% -0.0% 5.0% 10.0% -0.0% 5.0% VAR(3) Orthogonal Impulse Response (COL) VAR(3) Orthogonal Impulse Response (COL) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 10.0% 10.0% 15.0% 20.0% -15.0% 5.0% 0.0% 0.0% 5.0% VAR(3) Orthogonal Impulse Response (COL) VAR(3) Orthogonal Impulse Response (COL) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS LGDP -10.0% 20.0% -10.0% 10.0% 15.0% 0.0% 5.0% 0.0% VAR(3) Orthogonal Impulse Response (COG) VAR(3) Orthogonal Impulse Response (COG) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 10.0% -15.0% -5.0% 0.0% 60% -20% 40% 0% VAR(3) Orthogonal Impulse Response (COG) VAR(3) Orthogonal Impulse Response (COG) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS LGDP 10.0% -10.0% 15.0% -15.0% -5.0% 5.0% 0.0% 0.0% VAR(3) Orthogonal Impulse Response (CRI) VAR(3) Orthogonal Impulse Response (CRI) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 10.0% 15.0% 10.0% 0.0% 5.0% 5.0% 0.0% VAR(3) Orthogonal Impulse Response (CRI) VAR(3) Orthogonal Impulse Response (CRI) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS LGDP 10.0% --5.0% 5.0% 9.0% -0.0% 3.0% 6.0% -0.0% VAR(3) Orthogonal Impulse Response (CIV) VAR(3) Orthogonal Impulse Response (CIV) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 10.0% 25.0% -15.0% 20.0% 10.0% 15.0% 0.0% 5.0% 0.0% 5.0% VAR(3) Orthogonal Impulse Response (CIV) VAR(3) Orthogonal Impulse Response (CIV) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS LGDP 10.0% 15.0% 20.0% -12.0% -6.0% -9.0% -0.0% 5.0% 0.0% 3.0% VAR(3) Orthogonal Impulse Response (CUB) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 10.0% --10% 5.0% 0.0% 10% 20% 0% VAR(3) Orthogonal Impulse Response (CUB) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

VAR(3) Orthogonal Impulse Response (CUB)

VAR(3) Orthogonal Impulse Response (CUB)

LGDS LGDP 10.0% --10% 5.0% 0.0% 10% -0% VAR(3) Orthogonal Impulse Response (CYP) VAR(3) Orthogonal Impulse Response (CYP) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 20.0% 40.0% -10.0% 30.0% 0.0% 30% 60% 90% 0% VAR(3) Orthogonal Impulse Response (CYP) VAR(3) Orthogonal Impulse Response (CYP) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS LGDP -3.0% -2.5%-6.0% -0.0% 2.5% -5.0% -3.0% -0.0% VAR(3) Orthogonal Impulse Response (DNK) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS **LGDP** 12.5% -10.0% 15.0% 10.0% 0.0% 5.0% 5.0% 7.5% 0.0% 2.5% VAR(3) Orthogonal Impulse Response (DNK) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

VAR(3) Orthogonal Impulse Response (DNK)

VAR(3) Orthogonal Impulse Response (DNK)

LGDS LGDP -10.0% -5.0% 10.0% -10.0% 15.0% --5.0% 0.0% 5.0% 0.0% 5.0% -VAR(3) Orthogonal Impulse Response (DOM) VAR(3) Orthogonal Impulse Response (DOM) 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 20.0% -10.0% -10.0% 30.0% 40.0% -15.0% 20.0% -5.0% 0.0% 0.0% VAR(3) Orthogonal Impulse Response (DOM) VAR(3) Orthogonal Impulse Response (DOM) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS LGDP 12.0% -12.0% -0.0% 4.0% 8.0% 0.0% 8.0% -4.0% VAR(3) Orthogonal Impulse Response (ECU) VAR(3) Orthogonal Impulse Response (ECU) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 15.0% 10.0% 10.0% 25.0% -20.0% 20.0% -15.0% 5.0% 5.0% 0.0% 0.0% VAR(3) Orthogonal Impulse Response (ECU) VAR(3) Orthogonal Impulse Response (ECU) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS LGDP -10.0% -5.0% 10.0% -10.0% 15.0% 0.0% 5.0% 5.0% 0.0% VAR(3) Orthogonal Impulse Response (EGY) VAR(3) Orthogonal Impulse Response (EGY) 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS **LGDP** -10.0% 20.0% 30.0% 40.0% 10.0% 15.0% 10.0% 0.0% 5.0% 0.0% VAR(3) Orthogonal Impulse Response (EGY) VAR(3) Orthogonal Impulse Response (EGY) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS LGDP 10.0% 15.0% -20% 5.0% -40% 0.0% 20% -0% VAR(3) Orthogonal Impulse Response (SWZ) VAR(3) Orthogonal Impulse Response (SWZ) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 10.0% 15.0% 100% 5.0% 0.0% 50% 25% 75% 0% VAR(3) Orthogonal Impulse Response (SWZ) VAR(3) Orthogonal Impulse Response (SWZ) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS LGDP -2.5%-5.0% -5.0% 0.0% 0.0% 5.0% -2.5% 5.0% -VAR(3) Orthogonal Impulse Response (FIN) VAR(3) Orthogonal Impulse Response (FIN) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 10.0% 20.0% 15.0% 15.0% 10.0% 0.0% 5.0% 5.0% 0.0% VAR(3) Orthogonal Impulse Response (FIN) VAR(3) Orthogonal Impulse Response (FIN) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS LGDP -2.5%-2.5% -0.0% 2.5% 5.0% -0.0% 2.5% 5.0% 7.5% -VAR(3) Orthogonal Impulse Response (FRA) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 10.0% 15.0% -10.0% 0.0% 5.0% 5.0% 0.0% VAR(3) Orthogonal Impulse Response (FRA) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

VAR(3) Orthogonal Impulse Response (FRA)

VAR(3) Orthogonal Impulse Response (FRA)

LGDS LGDP -10% -10% 10% -10% 0% 0% VAR(3) Orthogonal Impulse Response (GAB) VAR(3) Orthogonal Impulse Response (GAB) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS **LGDP** 20.0% 40.0% 30.0% 10.0% 0.0% 10% 20% 0% VAR(3) Orthogonal Impulse Response (GAB) VAR(3) Orthogonal Impulse Response (GAB) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS LGDP -25% -50% 25% 50% 20% 10% 0% 0% VAR(3) Orthogonal Impulse Response (GMB) VAR(3) Orthogonal Impulse Response (GMB) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS **LGDP** -5.0% 10.0% 150% 100% -50% 0.0% 5.0% 50% 0% VAR(3) Orthogonal Impulse Response (GMB) VAR(3) Orthogonal Impulse Response (GMB) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS **LGDP** 5.0% -0.0% 5.0% 0.0% VAR(3) Orthogonal Impulse Response (DEU) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS **LGDP** 15.0% 10.0% 10.0% -0.0% 5.0% 0.0% 5.0% VAR(3) Orthogonal Impulse Response (DEU) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

VAR(3) Orthogonal Impulse Response (DEU)

VAR(3) Orthogonal Impulse Response (DEU)

LGDS **LGDP** -10.0% -20.0% 30.0% -10.0% 20.0% 0.0% 20% 10% 0% VAR(3) Orthogonal Impulse Response (GHA) VAR(3) Orthogonal Impulse Response (GHA) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 10.0% --5.0% 0.0% 5.0% 20% 60% 0% VAR(3) Orthogonal Impulse Response (GHA) VAR(3) Orthogonal Impulse Response (GHA) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS LGDP -5.0% -2.5%0.0% 4.0% -8.0% -2.5% -0.0% VAR(3) Orthogonal Impulse Response (GRC) VAR(3) Orthogonal Impulse Response (GRC) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 15.0% 10.0% 10.0% 0.0% 5.0% 5.0% 0.0% VAR(3) Orthogonal Impulse Response (GRC) VAR(3) Orthogonal Impulse Response (GRC) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS LGDP 10.0% 15.0% 10.0% 5.0% 0.0% 0.0% 5.0% -VAR(3) Orthogonal Impulse Response (GTM) VAR(3) Orthogonal Impulse Response (GTM) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS **LGDP** -5.0% 10.0% -0.0% 5.0% 10% 20% • 0% VAR(3) Orthogonal Impulse Response (GTM) VAR(3) Orthogonal Impulse Response (GTM) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS **LGDP** -10.0% 10.0% 20.0% --5.0% 10.0% -15.0% 0.0% 5.0% 5.0% 0.0% VAR(3) Orthogonal Impulse Response (HND) VAR(3) Orthogonal Impulse Response (HND) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 20.0% 30.0% 40.0% -10.0% -10.0% -5.0% 5.0% -0.0% 0.0% VAR(3) Orthogonal Impulse Response (HND) VAR(3) Orthogonal Impulse Response (HND) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS **LGDP** 5.0% -0.0% 0.0% 5.0% VAR(3) Orthogonal Impulse Response (HKG) VAR(3) Orthogonal Impulse Response (HKG) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS **LGDP** 10.0% 15.0% -10.0% 5.0% 0.0% 5.0% 0.0% VAR(3) Orthogonal Impulse Response (HKG) VAR(3) Orthogonal Impulse Response (HKG) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS **LGDP** 10.0% -10.0% --5.0% -5.0% 5.0% 0.0% 0.0% VAR(3) Orthogonal Impulse Response (ISL) VAR(3) Orthogonal Impulse Response (ISL) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 10.0% 10.0% 20.0% -15.0% 15.0% 20.0% -5.0% 5.0% 0.0% 0.0% VAR(3) Orthogonal Impulse Response (ISL) VAR(3) Orthogonal Impulse Response (ISL) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS LGDP -4.0% -4.0% -0.0% 8.0% -0.0% 4.0% 4.0% -8.0% -VAR(3) Orthogonal Impulse Response (IND) VAR(3) Orthogonal Impulse Response (IND) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 10.0% 20.0% • 15.0% 5.0% 0.0% 6.0% 9.0% 0.0% 3.0% VAR(3) Orthogonal Impulse Response (IND) VAR(3) Orthogonal Impulse Response (IND) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS LGDP -10% -10% -20% 10% 10% 0% 0% VAR(3) Orthogonal Impulse Response (IDN) VAR(3) Orthogonal Impulse Response (IDN) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDP LGDS 20.0% 30.0% 50.0% -40.0% 10.0% 0.0% 20% 30% 10% 0% VAR(3) Orthogonal Impulse Response (IDN) VAR(3) Orthogonal Impulse Response (IDN) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS LGDP -10% -10% -20% **-**10% -10% 0% 0% VAR(3) Orthogonal Impulse Response (IRN) VAR(3) Orthogonal Impulse Response (IRN) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 **LGDS LGDP** 10.0% 15.0% 0.0% 5.0% 10% 20% 30% 0% VAR(3) Orthogonal Impulse Response (IRN) VAR(3) Orthogonal Impulse Response (IRN) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS LGDP -20.0% -10.0% 10.0% • 0.0% 20% -10% 0% VAR(3) Orthogonal Impulse Response (IRQ) VAR(3) Orthogonal Impulse Response (IRQ) 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS **LGDP** 40% 20% 20% 60% 80% 10% 30% 0% VAR(3) Orthogonal Impulse Response (IRQ) VAR(3) Orthogonal Impulse Response (IRQ) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS LGDP -5.0%10.0% -5.0% 6.0% 0.0% 9.0% -0.0% 3.0% VAR(3) Orthogonal Impulse Response (IRL) VAR(3) Orthogonal Impulse Response (IRL) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS **LGDP** 10.0% 20.0% -15.0% 5.0% 0.0% 6.0% 9.0% -0.0% 3.0% VAR(3) Orthogonal Impulse Response (IRL) VAR(3) Orthogonal Impulse Response (IRL) 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS LGDP -4.0%10.0% -0.0% 5.0% 7.5% 4.0% 0.0% 2.5% VAR(3) Orthogonal Impulse Response (ISR) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 10.0% 15.0% -20.0% 0.0% 5.0% 0.0% 6.0% 2.0% 4.0% VAR(3) Orthogonal Impulse Response (ISR) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

VAR(3) Orthogonal Impulse Response (ISR)

VAR(3) Orthogonal Impulse Response (ISR)

LGDS LGDP 10.0% --5.0% 0.0% 5.0% -5.0% 0.0% VAR(3) Orthogonal Impulse Response (ITA) VAR(3) Orthogonal Impulse Response (ITA) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 10.0% 10.0% 0.0% 5.0% 5.0% 0.0% VAR(3) Orthogonal Impulse Response (ITA) VAR(3) Orthogonal Impulse Response (ITA) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS LGDP 10.0% -10% 15.0% --20% 5.0% 0.0% 10% -0% VAR(3) Orthogonal Impulse Response (JAM) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 12.0% -4.0% 8.0% 0.0% 40% 60% 20% 0% VAR(3) Orthogonal Impulse Response (JAM) 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

VAR(3) Orthogonal Impulse Response (JAM)

VAR(3) Orthogonal Impulse Response (JAM)

LGDS LGDP -5.0% 10.0% -0.0% 5.0% 5.0% -0.0% VAR(3) Orthogonal Impulse Response (JPN) VAR(3) Orthogonal Impulse Response (JPN) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 25.0% -10.0% 15.0% 20.0% 10.0% 0.0% 5.0% 0.0% 5.0% VAR(3) Orthogonal Impulse Response (JPN) VAR(3) Orthogonal Impulse Response (JPN) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS LGDP -5.0% 10.0% 0.0% 5.0% 0.0% 4.0% -8.0% -VAR(3) Orthogonal Impulse Response (KOR) VAR(3) Orthogonal Impulse Response (KOR) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 20.0% 10.0% 10.0% 15.0% 15.0% 5.0% 5.0% 0.0% 0.0% VAR(3) Orthogonal Impulse Response (KOR) VAR(3) Orthogonal Impulse Response (KOR) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS LGDP -10.0% -20.0%30.0% -20.0% 10.0% -20% 0.0% -40%· 20% 0% VAR(3) Orthogonal Impulse Response (KWT) VAR(3) Orthogonal Impulse Response (KWT) 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 **LGDS LGDP** 50% 25% 75% 20% 40% 60% -0% 0% VAR(3) Orthogonal Impulse Response (KWT) VAR(3) Orthogonal Impulse Response (KWT) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS LGDP 4.0% -12.0% -0.0% 5.0% -0.0% 8.0% VAR(3) Orthogonal Impulse Response (LUX) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 10.0% 10.0% 15.0% 15.0% 20.0% -0.0% 5.0% 5.0% 0.0% VAR(3) Orthogonal Impulse Response (LUX) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

VAR(3) Orthogonal Impulse Response (LUX)

VAR(3) Orthogonal Impulse Response (LUX)

LGDS LGDP -10.0% -20.0% 30.0% 40.0% -10.0% 10.0% 0.0% 0.0% 5.0% VAR(3) Orthogonal Impulse Response (MDG) VAR(3) Orthogonal Impulse Response (MDG) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP -4.0%0.0% 4.0% -100% -25% 50% 75% 0% VAR(3) Orthogonal Impulse Response (MDG) VAR(3) Orthogonal Impulse Response (MDG) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS LGDP 10.0% -15.0% -20.0% --20% 5.0% 0.0% 20% -0% VAR(3) Orthogonal Impulse Response (MWI) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 10.0% 15.0% 120% 0.0% 5.0% 40% 80% 0% VAR(3) Orthogonal Impulse Response (MWI) 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

VAR(3) Orthogonal Impulse Response (MWI)

VAR(3) Orthogonal Impulse Response (MWI)

LGDS **LGDP** -10.0% 10.0% --5.0%0.0% 5.0% 8.0% 12.0% · 0.0% 4.0% VAR(3) Orthogonal Impulse Response (MYS) VAR(3) Orthogonal Impulse Response (MYS) 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS **LGDP** 10.0% -15.0% 20.0% -10.0% -5.0% -5.0% 0.0% 0.0% VAR(3) Orthogonal Impulse Response (MYS) VAR(3) Orthogonal Impulse Response (MYS) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS LGDP -25% **-**25% -20% 30% -10% 0% 0% VAR(3) Orthogonal Impulse Response (MLI) VAR(3) Orthogonal Impulse Response (MLI) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDP **LGDS** -5.0% 10.0% 0.0% 5.0% 30% 60% 90% 0% VAR(3) Orthogonal Impulse Response (MLI) VAR(3) Orthogonal Impulse Response (MLI) 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS LGDP 10.0% -15.0% -5.0% -0.0% 10% 20% 30% -0%-VAR(3) Orthogonal Impulse Response (MLT) VAR(3) Orthogonal Impulse Response (MLT) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 40% 20% 60% 80% -10% 20% 0% 0% VAR(3) Orthogonal Impulse Response (MLT) VAR(3) Orthogonal Impulse Response (MLT) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS LGDP 10.0% --20% 0.0% 5.0% 20% -0% VAR(3) Orthogonal Impulse Response (MRT) VAR(3) Orthogonal Impulse Response (MRT) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 100% 5.0% 0.0% 25% 50% 75% 0% VAR(3) Orthogonal Impulse Response (MRT) VAR(3) Orthogonal Impulse Response (MRT) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS LGDP -5.0% 10.0% --10% 0.0% 5.0% -10% -0% VAR(3) Orthogonal Impulse Response (MUS) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 20.0% 30.0% 40.0% 10.0% 0.0% 20% 10% 0% VAR(3) Orthogonal Impulse Response (MUS) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

VAR(3) Orthogonal Impulse Response (MUS)

VAR(3) Orthogonal Impulse Response (MUS)

LGDS **LGDP** 10.0% -10.0% 0.0% 5.0% 0.0% 5.0% VAR(3) Orthogonal Impulse Response (MEX) VAR(3) Orthogonal Impulse Response (MEX) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 10.0% 20.0% 10.0% 15.0% 15.0% 5.0% 5.0% 0.0% 0.0% VAR(3) Orthogonal Impulse Response (MEX) VAR(3) Orthogonal Impulse Response (MEX) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS **LGDP** 10.0% -12.0% • 5.0% 0.0% 0.0% 4.0% -8.0% VAR(3) Orthogonal Impulse Response (MAR) VAR(3) Orthogonal Impulse Response (MAR) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 10.0% 20.0% -15.0% 6.0% 9.0% 0.0% 5.0% 0.0% 3.0% VAR(3) Orthogonal Impulse Response (MAR) VAR(3) Orthogonal Impulse Response (MAR) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS LGDP -5.0% -2.5%-5.0% --2.5%0.0% 0.0% 2.5% -5.0% -2.5% -7.5% VAR(3) Orthogonal Impulse Response (NLD) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 10.0% -10.0% -0.0% 5.0% 0.0% 5.0% VAR(3) Orthogonal Impulse Response (NLD) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

VAR(3) Orthogonal Impulse Response (NLD)

VAR(3) Orthogonal Impulse Response (NLD)

LGDS LGDP -10.0% -4.0%-5.0%-8.0% 0.0% 0.0% 5.0% • VAR(3) Orthogonal Impulse Response (NZL) VAR(3) Orthogonal Impulse Response (NZL) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 10.0% -15.0% -10.0% -15.0% -5.0% 5.0% 0.0% 0.0% VAR(3) Orthogonal Impulse Response (NZL) VAR(3) Orthogonal Impulse Response (NZL) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS LGDP 20.0% 10.0% 30.0% 40.0% -15.0% -10.0% 5.0% 0.0% 0.0% VAR(3) Orthogonal Impulse Response (NER) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 10.0% 15.0% 100% -0.0% 5.0% 50% 25% 75% 0% VAR(3) Orthogonal Impulse Response (NER) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

VAR(3) Orthogonal Impulse Response (NER)

VAR(3) Orthogonal Impulse Response (NER)

LGDS LGDP 10.0% -4.0% -8.0% -5.0% -0.0% 0.0% 2.5% 7.5% VAR(3) Orthogonal Impulse Response (NOR) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 10.0% 15.0% 10.0% 0.0% 5.0% 5.0% 0.0% VAR(3) Orthogonal Impulse Response (NOR) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

VAR(3) Orthogonal Impulse Response (NOR)

VAR(3) Orthogonal Impulse Response (NOR)

LGDS LGDP -10% -10% -20% 10% -10% 0% 0% VAR(3) Orthogonal Impulse Response (OMN) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 **LGDS LGDP** 30.0% 40.0% 20.0% 10.0% 0.0% 20% 30% -10% 0% VAR(3) Orthogonal Impulse Response (OMN) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

VAR(3) Orthogonal Impulse Response (OMN)

VAR(3) Orthogonal Impulse Response (OMN)

LGDS **LGDP** 10.0% --3.0% -12.5% 5.0% 0.0% 3.0% 6.0% 9.0% -7.5% 0.0% 2.5% VAR(3) Orthogonal Impulse Response (PAK) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS **LGDP** 20.0% 10.0% 10.0% -15.0% 5.0% 0.0% 2.5% 5.0% 7.5% 0.0% VAR(3) Orthogonal Impulse Response (PAK) 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

VAR(3) Orthogonal Impulse Response (PAK)

VAR(3) Orthogonal Impulse Response (PAK)

LGDS LGDP 12.0% -6.0% 9.0% 0.0% 3.0% -10% 20% -0% VAR(3) Orthogonal Impulse Response (PAN) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS **LGDP** 10.0% -5.0% 15.0% 20.0% -0.0% 5.0% 5.0% 0.0% 2.5% 7.5% VAR(3) Orthogonal Impulse Response (PAN) 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

VAR(3) Orthogonal Impulse Response (PAN)

VAR(3) Orthogonal Impulse Response (PAN)

LGDS LGDP 10.0% 20.0% 15.0% **−10% −** 5.0% 0.0% 10% -20% -0% VAR(3) Orthogonal Impulse Response (PNG) VAR(3) Orthogonal Impulse Response (PNG) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 15.0% 10.0% 5.0% 0.0% 40% 20% 60% 80% 0% VAR(3) Orthogonal Impulse Response (PNG) VAR(3) Orthogonal Impulse Response (PNG) 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS LGDP -15.0% -10.0% -20.0% -5.0% 5.0% --10% 0.0% 10% 0% VAR(3) Orthogonal Impulse Response (PRY) VAR(3) Orthogonal Impulse Response (PRY) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 10.0% -20.0% -15.0% -5.0% 0.0% 10% -20% -0% VAR(3) Orthogonal Impulse Response (PRY) VAR(3) Orthogonal Impulse Response (PRY) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS LGDP -10.0% -5.0% 10.0% -10.0% 15.0% -0.0% 5.0% 5.0% 0.0% VAR(3) Orthogonal Impulse Response (PER) VAR(3) Orthogonal Impulse Response (PER) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS **LGDP** 10.0% -15.0% 10.0% -20.0% -15.0% 5.0% -5.0% 0.0% 0.0% VAR(3) Orthogonal Impulse Response (PER) VAR(3) Orthogonal Impulse Response (PER) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS LGDP 0.0% 5.0% 6.0% 2.5% 0.0% 3.0% -9.0% 7.5% VAR(3) Orthogonal Impulse Response (PHL) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS **LGDP** 10.0% 15.0% -10.0% 0.0% 5.0% 0.0% 5.0% VAR(3) Orthogonal Impulse Response (PHL) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

VAR(3) Orthogonal Impulse Response (PHL)

VAR(3) Orthogonal Impulse Response (PHL)

LGDS LGDP -5.0%4.0% -0.0% 5.0% -0.0% 8.0% -VAR(3) Orthogonal Impulse Response (PRT) VAR(3) Orthogonal Impulse Response (PRT) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 20.0% • 10.0% 15.0% 15.0% 10.0% 0.0% 5.0% 5.0% 0.0% VAR(3) Orthogonal Impulse Response (PRT) VAR(3) Orthogonal Impulse Response (PRT) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS LGDP -10.0% 20.0% 40.0% -20.0% -10.0% 30.0% 10.0% -15.0% • 0.0% 5.0% 0.0% VAR(3) Orthogonal Impulse Response (RWA) VAR(3) Orthogonal Impulse Response (RWA) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS **LGDP** 15.0% -10.0% 5.0% 0.0% 20% 40% 60% -80% -0% VAR(3) Orthogonal Impulse Response (RWA) VAR(3) Orthogonal Impulse Response (RWA) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS **LGDP** -10.0% -15.0% -10.0% -25.0%-20.0% -15.0%-5.0%· -5.0% 5.0% -0.0% 0.0% 5.0% -VAR(3) Orthogonal Impulse Response (SAU) VAR(3) Orthogonal Impulse Response (SAU) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS **LGDP** 20.0% 30.0% 50.0% -10.0% 40.0% 0.0% 10% -20% -30% -0% VAR(3) Orthogonal Impulse Response (SAU) VAR(3) Orthogonal Impulse Response (SAU) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS **LGDP** -10.0% -15.0% --5.0% -15.0% -10.0% -10.0% 0.0% 5.0% 5.0% 0.0% VAR(3) Orthogonal Impulse Response (SEN) VAR(3) Orthogonal Impulse Response (SEN) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS **LGDP** 20.0% 30.0% 40.0% -15.0% -10.0% 10.0% 5.0% -0.0% 0.0% VAR(3) Orthogonal Impulse Response (SEN) VAR(3) Orthogonal Impulse Response (SEN) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS LGDP 0.0% 2.0% 4.0% 6.0% -0.0% 6.0% -2.0% -4.0% VAR(3) Orthogonal Impulse Response (SGP) 0.0 0.0 Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS **LGDP** 10.0% 15.0% -6.0% 9.0% 0.0% 5.0% 0.0% 3.0% VAR(3) Orthogonal Impulse Response (SGP) 0.0 0.0 Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5

10.0

10.0

VAR(3) Orthogonal Impulse Response (SGP)

VAR(3) Orthogonal Impulse Response (SGP)

Response to Shock in LGDP (95% CI)

Response to Shock in LGDS (95% CI)

12.0%

LGDS **LGDP** -3.0% -6.0%-3.0% 0.0% 6.0% -6.0% 0.0% 3.0% 3.0% VAR(3) Orthogonal Impulse Response (ZAF) VAR(3) Orthogonal Impulse Response (ZAF) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 10.0% 10.0% 15.0% 20.0% 15.0% 0.0% 5.0% 0.0% 5.0% VAR(3) Orthogonal Impulse Response (ZAF) VAR(3) Orthogonal Impulse Response (ZAF) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS LGDP -10.0%-10.0% -5.0% -5.0% 0.0% 5.0% 5.0% 0.0% VAR(3) Orthogonal Impulse Response (ESP) VAR(3) Orthogonal Impulse Response (ESP) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS **LGDP** 10.0% -15.0% -10.0% -15.0% -5.0% 5.0% 0.0% 0.0% VAR(3) Orthogonal Impulse Response (ESP) VAR(3) Orthogonal Impulse Response (ESP) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS **LGDP** -3.0% -4.0%-6.0% 0.0% 6.0% -0.0% 4.0% -3.0% VAR(3) Orthogonal Impulse Response (SWE) VAR(3) Orthogonal Impulse Response (SWE) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 10.0% 15.0% 15.0% 10.0% 0.0% 5.0% 5.0% 0.0% VAR(3) Orthogonal Impulse Response (SWE) VAR(3) Orthogonal Impulse Response (SWE) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS **LGDP** -5.0% -2.5% --5.0% 5.0% -0.0% 0.0% 2.5% 5.0% VAR(3) Orthogonal Impulse Response (CHE) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 10.0% 15.0% 10.0% 15.0% -0.0% 5.0% 5.0% 0.0% VAR(3) Orthogonal Impulse Response (CHE) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

VAR(3) Orthogonal Impulse Response (CHE)

VAR(3) Orthogonal Impulse Response (CHE)

LGDS LGDP 10.0% 15.0% --10% -5.0% 0.0% 10% • 20% -0% VAR(3) Orthogonal Impulse Response (SYR) VAR(3) Orthogonal Impulse Response (SYR) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 20.0% 30.0% 10.0% 40.0% 15.0% 25.0% 10.0% 50.0% -20.0% 0.0% 5.0% 0.0% VAR(3) Orthogonal Impulse Response (SYR) VAR(3) Orthogonal Impulse Response (SYR) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS LGDP 10.0% -10.0% -15.0% -5.0% 5.0% 0.0% 0.0% VAR(3) Orthogonal Impulse Response (THA) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 10.0% 15.0% 15.0% 10.0% 0.0% 5.0% 0.0% 5.0% VAR(3) Orthogonal Impulse Response (THA) 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

VAR(3) Orthogonal Impulse Response (THA)

VAR(3) Orthogonal Impulse Response (THA)

LGDS LGDP -10.0% -20.0% -30.0%10.0% -10.0% 0.0% 5.0% 15.0% -0.0% VAR(3) Orthogonal Impulse Response (TGO) VAR(3) Orthogonal Impulse Response (TGO) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP -5.0% 10.0% -5.0% -0.0% 25% 50% 75% -0% VAR(3) Orthogonal Impulse Response (TGO) VAR(3) Orthogonal Impulse Response (TGO) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS LGDP 15.0% 10.0% 10.0% 0.0% 5.0% 0.0% 5.0% -VAR(3) Orthogonal Impulse Response (TUN) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 12.0% 0.0% 4.0% 8.0% 20% 10% 30% 0% VAR(3) Orthogonal Impulse Response (TUN) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

VAR(3) Orthogonal Impulse Response (TUN)

VAR(3) Orthogonal Impulse Response (TUN)

LGDS LGDP 10.0% -10.0% -15.0% -15.0% -0.0% 5.0% 5.0% -0.0% VAR(3) Orthogonal Impulse Response (TUR) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS **LGDP** -5.0% 10.0% 20.0% -15.0% 10.0% 15.0% 0.0% 5.0% 5.0% 0.0% VAR(3) Orthogonal Impulse Response (TUR) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

VAR(3) Orthogonal Impulse Response (TUR)

VAR(3) Orthogonal Impulse Response (TUR)

LGDS LGDP 20% 40% -10% • 20% 0% 0% VAR(3) Orthogonal Impulse Response (UGA) VAR(3) Orthogonal Impulse Response (UGA) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 40% 20% 60% 80% -20% -10% -0% 0% VAR(3) Orthogonal Impulse Response (UGA) VAR(3) Orthogonal Impulse Response (UGA) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS LGDP -5.0%10.0% -12.0% -5.0% 6.0% 0.0% 9.0% 0.0% 3.0% VAR(3) Orthogonal Impulse Response (GBR) VAR(3) Orthogonal Impulse Response (GBR) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS **LGDP** -5.0% -5.0% 10.0% 15.0% 20.0% -10.0% -5.0% 0.0% 0.0% 5.0% VAR(3) Orthogonal Impulse Response (GBR) VAR(3) Orthogonal Impulse Response (GBR) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS **LGDP** -1.00% -0.50% 0.00% 1.00% 0.50% 1.00% • 3.00% -0.00% 2.00% 2.00% -1.50% -VAR(3) Orthogonal Impulse Response (USA) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 4.0% 2.0% 6.0% 8.0% -2.0% 3.0% 4.0% 0.0% 0.0% 1.0% VAR(3) Orthogonal Impulse Response (USA) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

VAR(3) Orthogonal Impulse Response (USA)

VAR(3) Orthogonal Impulse Response (USA)

LGDS LGDP 10.0% 15.0% -20.0% 25.0% -5.0% 0.0% 10% 20% -30% 0% VAR(3) Orthogonal Impulse Response (URY) 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 20% 40% 10% 20% 0% 0% VAR(3) Orthogonal Impulse Response (URY) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

VAR(3) Orthogonal Impulse Response (URY)

VAR(3) Orthogonal Impulse Response (URY)

LGDS LGDP -5.0% 10.0% -15.0% -10.0% --5.0% -5.0% 5.0% 0.0% 0.0% VAR(3) Orthogonal Impulse Response (VEN) VAR(3) Orthogonal Impulse Response (VEN) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS **LGDP** 25.0% • 10.0% 15.0% 20.0% 5.0% 0.0% 20% 30% 10% 0% VAR(3) Orthogonal Impulse Response (VEN) VAR(3) Orthogonal Impulse Response (VEN) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS **LGDP** -30.0% -20.0% -10.0% 20.0% • 20.0% -10.0% 10.0% 30.0% -15.0% 0.0% 5.0% 0.0% VAR(3) Orthogonal Impulse Response (ZWE) VAR(3) Orthogonal Impulse Response (ZWE) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP -10% 100% 50% 25% 75% 10% -0% 0% VAR(3) Orthogonal Impulse Response (ZWE) VAR(3) Orthogonal Impulse Response (ZWE) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

ANEXO - MODELOS VAR(10)

VAR(10) Model - Algeria

	-	
	Depender	ıt Variable
	LGDS	LGDP
LGDS - Lag 1	1.042***	0.085
	(0.303)	(0.149)
LGDP - Lag 1	-0.372	0.602^{*}
	(0.599)	(0.295)
LGDS - Lag 2	-0.207	0.053
	(0.405)	(0.199)
LGDP - Lag 2	0.386	-0.070
	(0.717)	(0.352)
LGDS - Lag 3	-0.015	-0.003
	(0.395)	(0.194)
LGDP - Lag 3	0.078	0.248
	(0.698)	(0.343)
LGDS - Lag 4	0.170	-0.006
	(0.383)	(0.188)
LGDP - Lag 4	0.030	-0.007
	(0.674)	(0.331)
LGDS - Lag 5	0.410	0.412^{**}
	(0.385)	(0.189)
LGDP - Lag 5	-0.774	-0.578*
	(0.673)	(0.331)
LGDS - Lag 6	-0.174	-0.211
	(0.392)	(0.192)
LGDP - Lag 6	0.606	0.612^{*}
	(0.687)	(0.338)
LGDS - Lag 7	0.024	0.172
	(0.347)	(0.171)
LGDP - Lag 7	-0.172	-0.367
	(0.636)	(0.312)
LGDS - Lag 8	0.124	-0.011
	(0.280)	(0.138)
LGDP - Lag 8	-0.627	-0.052
	(0.502)	
LGDS - Lag 9	-0.296	-0.236*

	(0.271)	(0.133)
LGDP - Lag 9	0.129	-0.034
	(0.512)	(0.251)
LGDS - Lag 10	-0.020	-0.004
	(0.247)	(0.121)
LGDP - Lag 10	0.523	0.243
	(0.360)	(0.177)
Constant	1.161	1.464**
	(1.446)	(0.711)
Observations	50	50
\mathbb{R}^2	0.963	0.987
Adjusted R ²	0.937	0.978
Residual Std. Error ($df = 29$)	0.206	0.101
F Statistic (df = 20; 29)	37.722***	109.305***

VAR(10) Model - Argentina

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.686	-0.270
	(0.444)	(0.557)
LGDP - Lag 1	0.090	1.042**
	(0.356)	(0.446)
LGDS - Lag 2	-0.256	-0.418
	(0.610)	(0.766)
LGDP - Lag 2	0.190	0.240
	(0.494)	(0.620)
LGDS - Lag 3	1.174^{*}	1.862**
	(0.611)	(0.766)
LGDP - Lag 3	-0.736	-1.183*
	(0.501)	(0.629)
LGDS - Lag 4	-1.097	-1.061
	(0.666)	(0.836)
LGDP - Lag 4	0.795	0.837
	(0.527)	(0.661)
LGDS - Lag 5	0.791	0.409
	(0.656)	(0.823)

LGDP - Lag 5	-0.690	-0.447
	(0.528)	(0.663)
LGDS - Lag 6	-0.826	-0.938
	(0.656)	(0.823)
LGDP - Lag 6	0.493	0.518
	(0.536)	(0.672)
LGDS - Lag 7	0.221	0.399
	(0.579)	(0.726)
LGDP - Lag 7	-0.042	-0.152
	(0.481)	(0.603)
LGDS - Lag 8	-0.118	-0.145
	(0.552)	(0.692)
LGDP - Lag 8	0.009	0.053
	(0.471)	(0.591)
LGDS - Lag 9	0.500	0.624
	(0.467)	(0.586)
LGDP - Lag 9	-0.272	-0.306
	(0.409)	(0.513)
LGDS - Lag 10	-0.214	-0.183
	(0.341)	(0.428)
LGDP - Lag 10	0.212	0.083
	(0.284)	(0.356)
Constant	0.605	0.822
	(0.411)	(0.515)
Observations	50	50
\mathbb{R}^2	0.929	0.926
Adjusted R ²	0.880	0.874
Residual Std. Error ($df = 29$)	0.197	0.247
F Statistic (df = 20; 29)	18.891***	18.014***

VAR(10) Model - Australia

	Depender	Dependent Variable	
	LGDS	LGDP	
LGDS - Lag 1	0.336	-0.302	
	(0.478)	(0.367)	
LGDP - Lag 1	1.136^{*}	1.607***	

	(0.628)	(0.481)
LGDS - Lag 2	0.528	0.455
	(0.568)	(0.435)
LGDP - Lag 2	-1.101	-0.790
	(0.788)	(0.604)
LGDS - Lag 3	-0.008	-0.150
	(0.537)	(0.411)
LGDP - Lag 3	-0.133	0.070
	(0.782)	(0.599)
LGDS - Lag 4	0.199	0.236
	(0.539)	(0.413)
LGDP - Lag 4	-0.207	-0.289
	(0.764)	(0.585)
LGDS - Lag 5	-0.097	-0.171
	(0.538)	(0.412)
LGDP - Lag 5	0.222	0.211
	(0.764)	(0.585)
LGDS - Lag 6	-0.362	-0.108
	(0.540)	(0.414)
LGDP - Lag 6	0.529	0.198
	(0.763)	(0.584)
LGDS - Lag 7	-0.160	-0.119
	(0.549)	(0.420)
LGDP - Lag 7	0.567	0.455
	(0.771)	(0.590)
LGDS - Lag 8	0.207	0.037
	(0.544)	(0.417)
LGDP - Lag 8	-0.716	
	(0.769)	(0.590)
LGDS - Lag 9	0.281	0.221
	(0.541)	, , , ,
LGDP - Lag 9	-0.733	
	(0.779)	, , , ,
LGDS - Lag 10	-0.266	
	(0.406)	, , , ,
LGDP - Lag 10		0 =0 <
8	0.729	0.596
Constant	0.729 (0.517) 0.058	

	(0.470)	(0.360)
Observations	50	50
\mathbb{R}^2	0.981	0.990
Adjusted R ²	0.968	0.983
Residual Std. Error ($df = 29$)	0.141	0.108
F Statistic (df = 20; 29)	75.896***	141.477***

VAR(10) Model - Austria

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	1.396***	0.576
	(0.456)	(0.432)
LGDP - Lag 1	-0.143	0.768
	(0.485)	(0.460)
LGDS - Lag 2	-1.079*	-0.955
	(0.608)	(0.576)
LGDP - Lag 2	0.322	0.199
	(0.647)	(0.614)
LGDS - Lag 3	0.616	0.740
	(0.630)	(0.597)
LGDP - Lag 3	-0.038	-0.155
	(0.642)	(0.609)
LGDS - Lag 4	-0.204	-0.421
	(0.632)	(0.599)
LGDP - Lag 4	0.180	0.311
	(0.635)	(0.601)
LGDS - Lag 5	-0.585	-0.343
	(0.604)	(0.572)
LGDP - Lag 5	0.185	-0.018
	(0.639)	(0.606)
LGDS - Lag 6	1.950***	1.668***
	(0.583)	(0.553)
LGDP - Lag 6	-1.813***	-1.435**
	(0.636)	(0.603)
LGDS - Lag 7	-1.595**	-1.594**
	(0.675)	(0.640)

LGDP - Lag 7	1.440* (0.713)	1.383** (0.676)
LGDS - Lag 8	1.312* (0.733)	1.185*
LGDP - Lag 8	-1.021 (0.754)	-0.843 (0.714)
LGDS - Lag 9	-0.902 (0.737)	
LGDP - Lag 9	0.883 (0.766)	0.918 (0.726)
LGDS - Lag 10	-0.219 (0.494)	0.047 (0.468)
LGDP - Lag 10	0.244 (0.537)	-0.079 (0.509)
Constant	0.395 (0.346)	
Observations	50	50
\mathbb{R}^2	0.994	0.995
Adjusted R ²	0.990	0.991
Residual Std. Error ($df = 29$)	0.091	0.086
F Statistic (df = 20; 29)	240.836***	* 271.898***

VAR(10) Model - Barbados

Dependent Variable	
LGDS	LGDP
0.578**	-0.028
(0.225)	(0.057)
0.148	1.481***
(0.896)	(0.226)
-0.028	0.086
(0.271)	(0.068)
-0.414	-1.015**
(1.613)	(0.407)
0.163	-0.133*
(0.281)	(0.071)
0.548	0.903^{*}
	LGDS 0.578** (0.225) 0.148 (0.896) -0.028 (0.271) -0.414 (1.613) 0.163 (0.281)

LGDS - Lag 4 LGDP - Lag 4 LGDP - Lag 4 LGDS - Lag 5 LGDS - Lag 5 LGDP - Lag 5 LGDP - Lag 6 LGDP - Lag 6 LGDP - Lag 6 LGDP - Lag 6 LGDP - Lag 7 LGDP - Lag 7 LGDP - Lag 7 LGDP - Lag 7 LGDP - Lag 8 LGDP - Lag 9 LGDP - Lag 10 LGDP - La		(1.831)	(0.462)
LGDP - Lag 4 -0.700 -0.794 (1.953) (0.493) LGDS - Lag 5 -0.339 -0.171*** (0.324) (0.082) LGDP - Lag 5 1.962 0.908* (1.957) (0.494) LGDS - Lag 6 0.116 0.125 (0.338) (0.085) LGDP - Lag 6 -0.841 -0.551 (1.863) (0.470) LGDS - Lag 7 -0.123 -0.051 (0.343) (0.087) LGDP - Lag 7 -0.123 -0.051 (0.343) (0.087) LGDS - Lag 8 0.233 0.060 (0.315) (0.079) LGDP - Lag 8 -0.535 -0.061 (1.621) (0.409) LGDS - Lag 9 -0.059 -0.028 (0.297) (0.075) LGDP - Lag 10 -0.021 -0.016 (0.217) (0.055) LGDP - Lag 10 -1.007 -0.071 (0.820) (0.207) Constant 0.223 0.376*** (0.537) (0.135) Observations R² 0.931 0.996 Adjusted R² Residual Std. Error (df = 29) F Statistic (df = 20; 29) 19.675*** 379.841***	LGDS - Lag 4	0.001	0.114
LGDS - Lag 5 LGDP - Lag 5 LGDP - Lag 5 LGDP - Lag 6 LGDP - Lag 6 LGDP - Lag 6 LGDP - Lag 6 LGDP - Lag 7 LGDS - Lag 7 LGDS - Lag 7 LGDS - Lag 8 LGDP - Lag 7 LGDS - Lag 8 LGDP - Lag 9 LGDS - Lag 9 LGDS - Lag 9 LGDP - Lag 10 LGDP - Lag 10 Constant Co		(0.315)	(0.079)
$ \begin{array}{c} \text{LGDS - Lag 5} & (1.953) & (0.493) \\ \text{LGDP - Lag 5} & -0.339 & -0.171^{**} \\ (0.324) & (0.082) \\ \text{LGDP - Lag 5} & 1.962 & 0.908^* \\ (1.957) & (0.494) \\ \text{LGDS - Lag 6} & 0.116 & 0.125 \\ (0.338) & (0.085) \\ \text{LGDP - Lag 6} & -0.841 & -0.551 \\ (1.863) & (0.470) \\ \text{LGDS - Lag 7} & -0.123 & -0.051 \\ (0.343) & (0.087) \\ \text{LGDP - Lag 7} & 0.431 & 0.020 \\ (1.789) & (0.451) \\ \text{LGDS - Lag 8} & 0.233 & 0.060 \\ (0.315) & (0.079) \\ \text{LGDP - Lag 8} & -0.535 & -0.061 \\ (1.621) & (0.409) \\ \text{LGDS - Lag 9} & -0.059 & -0.028 \\ (0.297) & (0.075) \\ \text{LGDP - Lag 9} & 0.744 & 0.174 \\ (1.433) & (0.362) \\ \text{LGDS - Lag 10} & -0.021 & -0.016 \\ (0.217) & (0.055) \\ \text{LGDP - Lag 10} & -1.007 & -0.071 \\ (0.820) & (0.207) \\ \text{Constant} & 0.223 & 0.376^{****} \\ (0.537) & (0.135) \\ \hline Observations & 50 & 50 \\ R^2 & 0.931 & 0.996 \\ \text{Adjusted R}^2 & 0.884 & 0.994 \\ \text{Residual Std. Error (df = 29)} & 0.314 & 0.079 \\ \text{F Statistic (df = 20; 29)} & 19.675^{****} 379.841^{****} \\ \end{array}$	LGDP - Lag 4	-0.700	-0.794
LGDP - Lag 5 LGDP - Lag 5 1.962 0.908* (1.957) (0.494) LGDS - Lag 6 0.116 0.125 (0.338) (0.085) LGDP - Lag 6 -0.841 -0.551 (1.863) (0.470) LGDS - Lag 7 -0.123 -0.051 (0.343) (0.087) LGDP - Lag 7 0.431 0.020 (1.789) (0.451) LGDS - Lag 8 0.233 0.060 (0.315) (0.079) LGDP - Lag 8 -0.535 -0.061 (1.621) (0.409) LGDS - Lag 9 -0.059 -0.028 (0.297) (0.075) LGDP - Lag 9 0.744 0.174 (1.433) (0.362) LGDS - Lag 10 -0.021 -0.016 (0.217) (0.055) LGDP - Lag 10 -1.007 -0.071 (0.820) (0.207) Constant 0.223 0.376*** (0.537) (0.135) Observations 50 50 R ² 0.931 0.996 Adjusted R ² 0.884 0.994 Residual Std. Error (df = 29) F Statistic (df = 20; 29) 19.675*** 379.841***	C	(1.953)	(0.493)
LGDP - Lag 5 LGDP - Lag 5 1.962 0.908* (1.957) (0.494) LGDS - Lag 6 0.116 0.125 (0.338) (0.085) LGDP - Lag 6 -0.841 -0.551 (1.863) (0.470) LGDS - Lag 7 -0.123 -0.051 (0.343) (0.087) LGDP - Lag 7 0.431 0.020 (1.789) (0.451) LGDS - Lag 8 0.233 0.060 (0.315) (0.079) LGDP - Lag 8 -0.535 -0.061 (1.621) (0.409) LGDS - Lag 9 -0.059 -0.028 (0.297) (0.075) LGDP - Lag 9 0.744 0.174 (1.433) (0.362) LGDS - Lag 10 -0.021 -0.016 (0.217) (0.055) LGDP - Lag 10 -1.007 -0.071 (0.820) (0.207) Constant 0.223 0.376*** (0.537) (0.135) Observations 50 50 R ² 0.931 0.996 Adjusted R ² 0.884 0.994 Residual Std. Error (df = 29) F Statistic (df = 20; 29) 19.675*** 379.841***	LGDS - Lag 5	-0.339	-0.171**
LGDS - Lag 6 (1.957) (0.494) LGDS - Lag 6 (0.338) (0.085) LGDP - Lag 6 (1.863) (0.470) LGDS - Lag 7 -0.123 -0.051 (0.343) (0.087) LGDP - Lag 7 (1.789) (0.451) LGDS - Lag 8 (0.315) (0.079) LGDP - Lag 8 -0.535 -0.061 (1.621) (0.409) LGDS - Lag 9 -0.059 -0.028 (0.297) (0.075) LGDP - Lag 9 (1.433) (0.362) LGDS - Lag 10 -0.021 -0.016 (0.217) (0.055) LGDP - Lag 10 -1.007 -0.071 (0.820) (0.207) Constant 0.223 0.376*** (0.537) (0.135) Observations R ² 0.931 0.996 Adjusted R ² 0.884 0.994 Residual Std. Error (df = 29) F Statistic (df = 20; 29) 19.675*** 379.841***	C	(0.324)	(0.082)
LGDS - Lag 6 (1.957) (0.494) LGDS - Lag 6 (0.338) (0.085) LGDP - Lag 6 (1.863) (0.470) LGDS - Lag 7 (0.343) (0.087) LGDP - Lag 7 (0.343) (0.087) LGDP - Lag 8 (0.315) (0.079) LGDP - Lag 8 (0.315) (0.079) LGDS - Lag 9 (0.297) (0.075) LGDP - Lag 9 (1.433) (0.362) LGDP - Lag 10 -0.021 -0.016 (0.217) (0.055) LGDP - Lag 10 -1.007 -0.071 (0.820) (0.207) Constant 0.223 0.376*** (0.537) (0.135) Observations R ² 0.931 0.996 Adjusted R ² 0.884 0.994 Residual Std. Error (df = 29) F Statistic (df = 20; 29) 19.675*** 379.841***	LGDP - Lag 5	1.962	0.908^{*}
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	<u> </u>	(1.957)	(0.494)
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	LGDS - Lag 6	0.116	0.125
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	-	(0.338)	(0.085)
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	LGDP - Lag 6	-0.841	-0.551
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		(1.863)	(0.470)
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	LGDS - Lag 7	-0.123	-0.051
$\begin{array}{c} \text{LGDS - Lag 8} & (1.789) & (0.451) \\ \text{LGDS - Lag 8} & 0.233 & 0.060 \\ (0.315) & (0.079) \\ \text{LGDP - Lag 8} & -0.535 & -0.061 \\ (1.621) & (0.409) \\ \text{LGDS - Lag 9} & -0.059 & -0.028 \\ (0.297) & (0.075) \\ \text{LGDP - Lag 9} & 0.744 & 0.174 \\ (1.433) & (0.362) \\ \text{LGDS - Lag 10} & -0.021 & -0.016 \\ (0.217) & (0.055) \\ \text{LGDP - Lag 10} & -1.007 & -0.071 \\ (0.820) & (0.207) \\ \text{Constant} & 0.223 & 0.376^{***} \\ (0.537) & (0.135) \\ \hline Observations & 50 & 50 \\ R^2 & 0.931 & 0.996 \\ \text{Adjusted R}^2 & 0.884 & 0.994 \\ \text{Residual Std. Error (df = 29)} & 0.314 & 0.079 \\ \text{F Statistic (df = 20; 29)} & 19.675^{***} 379.841^{***} \\ \hline \end{array}$		(0.343)	(0.087)
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	LGDP - Lag 7	0.431	0.020
$\begin{array}{c} \text{LGDP - Lag 8} & (0.315) & (0.079) \\ \text{LGDS - Lag 9} & -0.535 & -0.061 \\ (1.621) & (0.409) \\ \text{LGDS - Lag 9} & -0.059 & -0.028 \\ (0.297) & (0.075) \\ \text{LGDP - Lag 9} & 0.744 & 0.174 \\ (1.433) & (0.362) \\ \text{LGDS - Lag 10} & -0.021 & -0.016 \\ (0.217) & (0.055) \\ \text{LGDP - Lag 10} & -1.007 & -0.071 \\ (0.820) & (0.207) \\ \text{Constant} & 0.223 & 0.376^{***} \\ (0.537) & (0.135) \\ \hline \text{Observations} & 50 & 50 \\ \text{R}^2 & 0.931 & 0.996 \\ \text{Adjusted R}^2 & 0.884 & 0.994 \\ \text{Residual Std. Error (df = 29)} & 0.314 & 0.079 \\ \text{F Statistic (df = 20; 29)} & 19.675^{***} 379.841^{***} \end{array}$		(1.789)	(0.451)
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	LGDS - Lag 8	0.233	0.060
$ \begin{array}{c} \text{LGDS - Lag 9} & (1.621) & (0.409) \\ \text{LGDP - Lag 9} & -0.059 & -0.028 \\ (0.297) & (0.075) \\ \text{LGDP - Lag 9} & 0.744 & 0.174 \\ (1.433) & (0.362) \\ \text{LGDS - Lag 10} & -0.021 & -0.016 \\ (0.217) & (0.055) \\ \text{LGDP - Lag 10} & -1.007 & -0.071 \\ (0.820) & (0.207) \\ \text{Constant} & 0.223 & 0.376^{***} \\ (0.537) & (0.135) \\ \hline \text{Observations} & 50 & 50 \\ \text{R}^2 & 0.931 & 0.996 \\ \text{Adjusted R}^2 & 0.884 & 0.994 \\ \text{Residual Std. Error (df = 29)} & 0.314 & 0.079 \\ \text{F Statistic (df = 20; 29)} & 19.675^{***} 379.841^{***} \\ \hline \end{array} $		(0.315)	(0.079)
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	LGDP - Lag 8	-0.535	-0.061
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		(1.621)	(0.409)
$\begin{array}{c ccccc} LGDP - Lag \ 9 & 0.744 & 0.174 \\ & (1.433) & (0.362) \\ LGDS - Lag \ 10 & -0.021 & -0.016 \\ & (0.217) & (0.055) \\ LGDP - Lag \ 10 & -1.007 & -0.071 \\ & (0.820) & (0.207) \\ Constant & 0.223 & 0.376^{***} \\ & (0.537) & (0.135) \\ \hline Observations & 50 & 50 \\ R^2 & 0.931 & 0.996 \\ Adjusted \ R^2 & 0.884 & 0.994 \\ Residual \ Std. \ Error \ (df = 29) & 0.314 & 0.079 \\ F \ Statistic \ (df = 20; 29) & 19.675^{***} \ 379.841^{***} \\ \hline \end{array}$	LGDS - Lag 9	-0.059	-0.028
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		(0.297)	(0.075)
$\begin{array}{c ccccc} LGDS - Lag \ 10 & -0.021 & -0.016 \\ & (0.217) & (0.055) \\ LGDP - Lag \ 10 & -1.007 & -0.071 \\ & (0.820) & (0.207) \\ Constant & 0.223 & 0.376^{***} \\ & (0.537) & (0.135) \\ \hline Observations & 50 & 50 \\ R^2 & 0.931 & 0.996 \\ Adjusted \ R^2 & 0.884 & 0.994 \\ Residual \ Std. \ Error \ (df = 29) & 0.314 & 0.079 \\ F \ Statistic \ (df = 20; 29) & 19.675^{***} \ 379.841^{***} \\ \hline \end{array}$	LGDP - Lag 9	0.744	0.174
$\begin{array}{c} \text{LGDP - Lag 10} & (0.217) & (0.055) \\ \text{LGDP - Lag 10} & -1.007 & -0.071 \\ & (0.820) & (0.207) \\ \text{Constant} & 0.223 & 0.376^{***} \\ & (0.537) & (0.135) \\ \hline \\ \text{Observations} & 50 & 50 \\ \text{R}^2 & 0.931 & 0.996 \\ \text{Adjusted R}^2 & 0.884 & 0.994 \\ \text{Residual Std. Error (df = 29)} & 0.314 & 0.079 \\ \text{F Statistic (df = 20; 29)} & 19.675^{***} 379.841^{***} \\ \hline \end{array}$		(1.433)	(0.362)
LGDP - Lag 10 -1.007 -0.071 (0.820) (0.207) Constant 0.223 0.376^{***} (0.537) (0.135) Observations 50 50 R^2 0.931 0.996 Adjusted R^2 0.884 0.994 Residual Std. Error (df = 29) 0.314 0.079 F Statistic (df = 20; 29) 19.675^{***} 379.841^{***}	LGDS - Lag 10	-0.021	-0.016
$ \begin{array}{c} \text{Constant} & (0.820) & (0.207) \\ 0.223 & 0.376^{***} \\ (0.537) & (0.135) \\ \hline \\ \text{Observations} & 50 & 50 \\ R^2 & 0.931 & 0.996 \\ \text{Adjusted R}^2 & 0.884 & 0.994 \\ \text{Residual Std. Error (df = 29)} & 0.314 & 0.079 \\ \text{F Statistic (df = 20; 29)} & 19.675^{***} 379.841^{***} \\ \hline \end{array} $		(0.217)	(0.055)
$ \begin{array}{c cccc} Constant & 0.223 & 0.376^{***} \\ \hline & (0.537) & (0.135) \\ \hline Observations & 50 & 50 \\ R^2 & 0.931 & 0.996 \\ Adjusted R^2 & 0.884 & 0.994 \\ Residual Std. Error (df = 29) & 0.314 & 0.079 \\ F Statistic (df = 20; 29) & 19.675^{***} 379.841^{***} \\ \hline \end{array} $	LGDP - Lag 10	-1.007	-0.071
		(0.820)	(0.207)
Observations 50 50 R^2 0.931 0.996 Adjusted R^2 0.884 0.994 Residual Std. Error (df = 29) 0.314 0.079 F Statistic (df = 20; 29) 19.675*** 379.841***	Constant	0.223	0.376***
R^2 0.9310.996Adjusted R^2 0.8840.994Residual Std. Error (df = 29)0.3140.079F Statistic (df = 20; 29)19.675*** 379.841***		(0.537)	(0.135)
Adjusted R ² 0.884 0.994 Residual Std. Error (df = 29) 0.314 0.079 F Statistic (df = 20; 29) 19.675** 379.841 ***	Observations	50	50
Residual Std. Error (df = 29) 0.314 0.079 F Statistic (df = 20; 29) 19.675*** 379.841***	\mathbb{R}^2	0.931	0.996
F Statistic (df = 20; 29) 19.675*** 379.841***	·		
	·		
37	-	19.675	379.841***

VAR(10) Model - Belgium

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.800*	0.058
	(0.443)	(0.423)
LGDP - Lag 1	0.544	1.346***
	(0.467)	(0.447)
LGDS - Lag 2	-0.067	0.021
	(0.546)	(0.522)
LGDP - Lag 2	-0.665	-0.753
	(0.617)	(0.590)
LGDS - Lag 3	0.060	0.102
	(0.543)	(0.519)
LGDP - Lag 3	0.262	0.252
	(0.633)	(0.606)
LGDS - Lag 4	0.317	-0.090
	(0.519)	(0.497)
LGDP - Lag 4	-0.481	-0.064
	(0.628)	(0.601)
LGDS - Lag 5	-0.998*	-0.718
	(0.528)	(0.505)
LGDP - Lag 5	0.907	0.669
	(0.671)	(0.642)
LGDS - Lag 6	1.804***	1.400**
	(0.547)	(0.523)
LGDP - Lag 6	-1.948***	-1.451**
	(0.698)	(0.668)
LGDS - Lag 7	-1.070 [*]	-0.761
	(0.621)	(0.594)
LGDP - Lag 7	1.288	0.842
	(0.778)	(0.744)
LGDS - Lag 8	0.256	0.165
	(0.649)	(0.621)
LGDP - Lag 8	-0.160	0.011
	(0.812)	(0.777)
LGDS - Lag 9	0.061	-0.033

	(0.635)	(0.607)
LGDP - Lag 9	-0.201	-0.226
	(0.779)	(0.745)
LGDS - Lag 10	-0.428	-0.150
	(0.431)	(0.413)
LGDP - Lag 10	0.635	0.320
	(0.538)	(0.515)
Constant	0.592^{*}	0.633**
	(0.303)	(0.289)
Observations	50	50
\mathbb{R}^2	0.991	0.992
Adjusted R ²	0.985	0.986
Residual Std. Error ($df = 29$)	0.099	0.095
F Statistic (df = 20; 29)	159.986***	* 173.487***

VAR(10) Model - Benin

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.308*	-0.055**
	(0.172)	(0.022)
LGDP - Lag 1	1.582	0.737***
	(1.446)	(0.184)
LGDS - Lag 2	0.031	0.002
	(0.196)	(0.025)
LGDP - Lag 2	0.564	0.153
	(1.806)	(0.230)
LGDS - Lag 3	0.487^{**}	0.012
	(0.192)	(0.024)
LGDP - Lag 3	-0.870	0.004
	(1.767)	(0.225)
LGDS - Lag 4	-0.102	0.038
	(0.178)	(0.023)
LGDP - Lag 4	0.888	0.157
	(1.479)	(0.188)
LGDS - Lag 5	0.290	0.024
	(0.178)	(0.023)

LGDP - Lag 5	-1.237	-0.100
	(1.348)	(0.171)
LGDS - Lag 6	-0.170	0.080^{***}
	(0.180)	(0.023)
LGDP - Lag 6	-1.782	-0.074
	(1.366)	(0.174)
LGDS - Lag 7	-0.214	-0.069**
G	(0.206)	(0.026)
LGDP - Lag 7	0.425	-0.175
-	(1.381)	(0.176)
LGDS - Lag 8	-0.043	0.023
G	(0.227)	(0.029)
LGDP - Lag 8	0.351	0.002
-	(1.378)	(0.175)
LGDS - Lag 9	0.111	-0.005
G	(0.219)	(0.028)
LGDP - Lag 9	1.011	0.130
-	(1.329)	(0.169)
LGDS - Lag 10	-0.167	-0.003
	(0.183)	(0.023)
LGDP - Lag 10	0.302	0.023
-	(1.122)	(0.143)
Constant	-6.012**	0.811**
	(2.703)	(0.344)
Observations	50	50
R^2	0.881	0.984
Adjusted R ²	0.798	0.974
Residual Std. Error ($df = 29$)	0.894	0.114
F Statistic (df = 20; 29)	10.687***	91.610***

VAR(10) Model - Bolivia

	Dependen	Dependent Variable	
	LGDS	LGDP	
LGDS - Lag 1	1.403***	0.144	
	(0.326)	(0.147)	
LGDP - Lag 1	-0.620	0.837**	

	(0.734)	(0.332)
LGDS - Lag 2	-0.308	0.138
	(0.500)	(0.226)
LGDP - Lag 2	0.685	-0.162
G	(1.066)	(0.481)
LGDS - Lag 3	-0.704	-0.494**
-	(0.521)	(0.235)
LGDP - Lag 3	0.786	0.826^{*}
	(1.064)	(0.480)
LGDS - Lag 4	0.848^{*}	0.457**
	(0.492)	(0.222)
LGDP - Lag 4	-1.377	-0.909*
	(1.007)	(0.455)
LGDS - Lag 5	-0.063	-0.065
	(0.502)	(0.226)
LGDP - Lag 5	0.059	0.110
	(0.978)	(0.442)
LGDS - Lag 6	0.056	-0.096
	(0.480)	(0.217)
LGDP - Lag 6	0.368	0.018
	(0.949)	(0.428)
LGDS - Lag 7	-0.404	0.054
	(0.395)	(0.178)
LGDP - Lag 7	0.225	0.171
	(0.833)	(0.376)
LGDS - Lag 8	0.290	0.006
	(0.380)	(0.172)
LGDP - Lag 8	-0.683	-0.385
	(0.765)	(0.345)
LGDS - Lag 9	0.020	0.024
	(0.375)	(0.169)
LGDP - Lag 9	0.369	0.272
	(0.754)	(0.340)
LGDS - Lag 10	-0.222	
	(0.253)	,
LGDP - Lag 10	0.232	0.041
	(0.509)	
Constant	0.173	0.618

	(0.877)	(0.396)
Observations	50	50
R^2	0.953	0.985
Adjusted R ²	0.921	0.975
Residual Std. Error ($df = 29$)	0.239	0.108
F Statistic (df = 20; 29)	29.465***	98.361***

VAR(10) Model - Botswana

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.338	-0.143
	(0.262)	(0.148)
LGDP - Lag 1	0.908^*	1.409***
	(0.493)	(0.278)
LGDS - Lag 2	0.003	-0.070
	(0.237)	(0.134)
LGDP - Lag 2	-0.880	-0.497
	(0.685)	(0.387)
LGDS - Lag 3	0.256	0.222^{*}
	(0.214)	(0.121)
LGDP - Lag 3	-0.146	-0.113
	(0.666)	(0.376)
LGDS - Lag 4	0.292	0.115
	(0.196)	(0.111)
LGDP - Lag 4	-0.702	-0.202
	(0.659)	(0.373)
LGDS - Lag 5	-0.197	-0.146
	(0.166)	(0.094)
LGDP - Lag 5	0.194	-0.083
	(0.629)	(0.356)
LGDS - Lag 6	-0.190	-0.040
	(0.138)	(0.078)
LGDP - Lag 6	0.868	0.490
	(0.570)	(0.322)
LGDS - Lag 7	0.003	0.017
	(0.106)	(0.060)

LGDP - Lag 7	-0.231 (0.572)	-0.035 (0.323)
LGDS - Lag 8	0.166* (0.092)	0.051 (0.052)
LGDP - Lag 8	-0.064 (0.572)	-0.079 (0.323)
LGDS - Lag 9	0.056 (0.079)	-0.005 (0.045)
LGDP - Lag 9	-0.432 (0.562)	
LGDS - Lag 10	-0.012 (0.068)	
LGDP - Lag 10	0.522 (0.332)	0.176 (0.188)
Constant	1.974*** (0.703)	0.853** (0.398)
Observations	50	50
\mathbb{R}^2	0.988	0.994
Adjusted R ²	0.980	0.991
Residual Std. Error ($df = 29$)	0.186	0.105
F Statistic (df = 20; 29)	118.669***	256.531***

VAR(10) Model - Brazil

Dependent Variable	
LGDS	LGDP
1.004***	0.292
(0.322)	(0.280)
-0.034	0.895^{***}
(0.358)	(0.312)
0.176	0.002
(0.395)	(0.343)
-0.377	-0.284
(0.456)	(0.397)
-0.290	-0.262
(0.361)	(0.315)
0.832^{*}	0.388
	LGDS 1.004*** (0.322) -0.034 (0.358) 0.176 (0.395) -0.377 (0.456) -0.290 (0.361)

	(0.456)	(0.397)
LGDS - Lag 4	0.068	0.079
	(0.368)	(0.320)
LGDP - Lag 4	-0.799	-0.310
	(0.489)	(0.425)
LGDS - Lag 5	-0.446	-0.437
	(0.362)	(0.315)
LGDP - Lag 5	0.443	0.372
	(0.508)	(0.442)
LGDS - Lag 6	1.022***	0.916***
	(0.361)	(0.314)
LGDP - Lag 6	-0.845	-0.778^*
	(0.513)	(0.446)
LGDS - Lag 7	-0.631*	-0.406
	(0.359)	(0.313)
LGDP - Lag 7	1.251**	0.669
	(0.519)	(0.452)
LGDS - Lag 8	0.066	-0.037
	(0.356)	(0.310)
LGDP - Lag 8	-0.755	-0.367
	(0.542)	(0.472)
LGDS - Lag 9	-0.085	0.259
	(0.340)	(0.296)
LGDP - Lag 9	0.114	-0.064
	(0.518)	(0.451)
LGDS - Lag 10	-0.375	-0.537**
	(0.298)	(0.259)
LGDP - Lag 10	0.587	0.569^{*}
	(0.348)	(0.302)
Constant	-0.084	0.226
	(0.523)	(0.455)
Observations	50	50
R^2	0.976	0.984
Adjusted R ²	0.959	0.972
Residual Std. Error ($df = 29$)	0.167	0.146
F Statistic (df = 20; 29)	58.406***	87.274***
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VAR(10) Model - Burkina Faso

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.607***	0.010
	(0.186)	(0.030)
LGDP - Lag 1	0.638	1.226***
	(1.137)	(0.184)
LGDS - Lag 2	0.032	0.007
	(0.215)	(0.035)
LGDP - Lag 2	0.540	-0.286
	(1.747)	(0.283)
LGDS - Lag 3	0.100	0.0002
	(0.207)	(0.033)
LGDP - Lag 3	-1.175	0.095
	(1.680)	(0.272)
LGDS - Lag 4	-0.168	-0.012
	(0.202)	(0.033)
LGDP - Lag 4	-0.197	-0.143
	(1.680)	(0.272)
LGDS - Lag 5	0.177	-0.022
	(0.196)	(0.032)
LGDP - Lag 5	2.101	-0.010
	(1.688)	(0.273)
LGDS - Lag 6	0.069	0.037
	(0.199)	(0.032)
LGDP - Lag 6	-2.858	0.040
	(1.742)	(0.282)
LGDS - Lag 7	0.015	-0.023
	(0.200)	(0.032)
LGDP - Lag 7	2.897	-0.156
	(1.805)	(0.292)
LGDS - Lag 8	-0.376*	0.048
	(0.198)	(0.032)
LGDP - Lag 8	-2.999	0.478
	(1.863)	(0.301)
LGDS - Lag 9	0.130	-0.065*

	(0.219)	(0.035)
LGDP - Lag 9	1.940	-0.335
	(1.972)	(0.319)
LGDS - Lag 10	-0.094	0.042
	(0.194)	(0.031)
LGDP - Lag 10	-0.256	0.038
	(1.251)	(0.202)
Constant	-2.140	0.279
	(1.347)	(0.218)
Observations	50	50
R^2	0.749	0.971
Adjusted R ²	0.576	0.951
Residual Std. Error ($df = 29$)	0.850	0.138
F Statistic (df = 20; 29)	4.324***	48.163***

VAR(10) Model - Cameroon

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.249	-0.024
	(0.230)	(0.158)
LGDP - Lag 1	0.460	0.900^{***}
	(0.334)	(0.230)
LGDS - Lag 2	0.136	0.249
	(0.233)	(0.160)
LGDP - Lag 2	0.043	-0.095
	(0.420)	(0.289)
LGDS - Lag 3	0.418^{*}	0.032
	(0.243)	(0.167)
LGDP - Lag 3	-0.346	-0.035
	(0.413)	(0.284)
LGDS - Lag 4	0.268	0.039
	(0.254)	(0.175)
LGDP - Lag 4	-0.032	-0.138
	(0.405)	(0.279)
LGDS - Lag 5	0.209	-0.062
	(0.229)	(0.157)

LGDP - Lag 5	-0.045	0.281
	(0.394)	(0.271)
LGDS - Lag 6	-0.474*	-0.084
	(0.233)	(0.160)
LGDP - Lag 6	0.327	0.129
	(0.406)	(0.279)
LGDS - Lag 7	0.009	-0.145
	(0.249)	(0.171)
LGDP - Lag 7	-0.380	-0.165
	(0.405)	(0.278)
LGDS - Lag 8	-0.159	0.021
	(0.237)	(0.163)
LGDP - Lag 8	-0.009	-0.208
	(0.393)	(0.271)
LGDS - Lag 9	0.174	0.122
	(0.236)	(0.162)
LGDP - Lag 9	-0.042	-0.014
	(0.387)	(0.266)
LGDS - Lag 10	-0.187	-0.137
	(0.220)	(0.152)
LGDP - Lag 10	0.330	0.305
	(0.306)	(0.210)
Constant	-0.195	0.248
	(0.892)	(0.614)
Observations	50	50
\mathbb{R}^2	0.954	0.972
Adjusted R ²	0.923	0.953
Residual Std. Error ($df = 29$)	0.176	0.121
F Statistic (df = 20; 29)	30.201***	50.219***

VAR(10) Model - Canada

	Depender	Dependent Variable	
	LGDS	LGDP	
LGDS - Lag 1	0.452	-0.433	
	(0.532)	(0.272)	
LGDP - Lag 1	1.104	1.939***	

	(1.020)	(0.521)
LGDS - Lag 2	0.633	0.735
	(0.873)	(0.446)
LGDP - Lag 2	-1.650	-1.536
	(1.790)	(0.914)
LGDS - Lag 3	0.125	-0.021
	(0.956)	(0.488)
LGDP - Lag 3	-0.292	-0.059
	(1.929)	(0.986)
LGDS - Lag 4	-0.879	-0.343
	(0.929)	(0.475)
LGDP - Lag 4	1.882	0.747
	(1.905)	(0.973)
LGDS - Lag 5	0.822	0.277
	(0.920)	(0.470)
LGDP - Lag 5	-1.374	-0.419
	(1.882)	(0.961)
LGDS - Lag 6	0.632	0.412
	(0.908)	(0.464)
LGDP - Lag 6	-1.171	-0.588
	(1.846)	(0.943)
LGDS - Lag 7	-1.146	-0.472
	(0.911)	(0.465)
LGDP - Lag 7	2.561	0.956
	(1.832)	(0.936)
LGDS - Lag 8	0.242	-0.048
	(0.907)	(0.464)
LGDP - Lag 8	-0.617	0.060
	(1.865)	(0.953)
LGDS - Lag 9	0.348	0.422
	(0.826)	(0.422)
LGDP - Lag 9	-0.991	-1.005
	(1.688)	(0.862)
LGDS - Lag 10	-0.370	
	(0.465)	(0.238)
LGDP - Lag 10	0.643	0.565
	(0.825)	(0.421)
Constant	0.284	0.905

	(1.395)	(0.713)
Observations	50	50
\mathbb{R}^2	0.983	0.995
Adjusted R ²	0.971	0.992
Residual Std. Error ($df = 29$)	0.122	0.062
F Statistic (df = 20; 29)	82.161***	318.714***

VAR(10) Model - Central African Republic

·	-	
	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.383**	-0.004
	(0.181)	(0.027)
LGDP - Lag 1	-0.180	0.856^{***}
	(1.206)	(0.177)
LGDS - Lag 2	-0.078	-0.038
	(0.190)	(0.028)
LGDP - Lag 2	0.240	0.052
	(1.602)	(0.235)
LGDS - Lag 3	0.009	-0.018
	(0.183)	(0.027)
LGDP - Lag 3	-0.075	0.100
	(1.583)	(0.232)
LGDS - Lag 4	0.212	-0.020
	(0.176)	(0.026)
LGDP - Lag 4	-0.950	-0.198
	(1.580)	(0.232)
LGDS - Lag 5	-0.127	0.022
	(0.182)	(0.027)
LGDP - Lag 5	0.607	0.036
	(1.622)	(0.238)
LGDS - Lag 6	-0.006	-0.021
	(0.185)	(0.027)
LGDP - Lag 6	-0.255	-0.045
	(1.614)	(0.237)
LGDS - Lag 7	-0.168	0.010
	(0.184)	(0.027)

LGDP - Lag 7	0.967 (1.705)	0.065 (0.250)
LGDS - Lag 8	0.146 (0.193)	-0.019 (0.028)
LGDP - Lag 8	-0.164 (1.844)	0.1-00
LGDS - Lag 9	0.011 (0.202)	-0.004 (0.030)
LGDP - Lag 9	-1.137 (1.853)	0.032 (0.272)
LGDS - Lag 10	-0.191 (0.185)	0.012 (0.027)
LGDP - Lag 10	1.413 (1.353)	0.199 (0.199)
Constant	-0.708 (2.061)	0.634** (0.303)
Observations	50	50
\mathbb{R}^2	0.484	0.922
Adjusted R ²	0.128	0.868
Residual Std. Error ($df = 29$)	1.016	0.149
F Statistic (df = 20; 29)	1.360	17.071***

VAR(10) Model - Chad

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.425**	0.021
	(0.187)	(0.028)
LGDP - Lag 1	1.450	1.220***
	(1.282)	(0.191)
LGDS - Lag 2	0.409^{*}	-0.009
	(0.203)	(0.030)
LGDP - Lag 2	0.411	-0.157
	(2.036)	(0.304)
LGDS - Lag 3	0.104	0.004
	(0.220)	(0.033)
LGDP - Lag 3	-1.489	0.134

	(2.067)	(0.309)
LGDS - Lag 4	-0.042	-0.027
	(0.211)	(0.032)
LGDP - Lag 4	-2.378	-0.495
	(2.102)	(0.314)
LGDS - Lag 5	-0.220	0.003
	(0.212)	(0.032)
LGDP - Lag 5	4.539**	0.221
	(2.172)	(0.325)
LGDS - Lag 6	-0.013	-0.016
	(0.207)	(0.031)
LGDP - Lag 6	-1.550	0.202
	(2.379)	(0.355)
LGDS - Lag 7	0.424^{*}	0.042
	(0.210)	(0.031)
LGDP - Lag 7	-1.355	-0.081
	(2.329)	(0.348)
LGDS - Lag 8	0.022	0.019
	(0.217)	(0.032)
LGDP - Lag 8	-1.150	-0.246
	(2.322)	(0.347)
LGDS - Lag 9	-0.024	-0.004
	(0.206)	(0.031)
LGDP - Lag 9	1.205	-0.103
	(2.181)	(0.326)
LGDS - Lag 10	-0.324*	-0.023
	(0.186)	(0.028)
LGDP - Lag 10	0.787	0.277
	(1.364)	(0.204)
Constant	-1.950	0.177
	(1.740)	(0.260)
Observations	50	50
R^2	0.855	0.969
Adjusted R ²	0.755	0.948
Residual Std. Error (df = 29)	1.009	0.151
F Statistic (df = 20; 29)	8.540***	45.739***
N_{oto} , $*_n < 0.1$, $*_n < 0.05$, $*_n < 0.01$		

VAR(10) Model - Chile

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.247	-0.329***
	(0.186)	(0.083)
LGDP - Lag 1	1.488***	1.607***
	(0.384)	(0.171)
LGDS - Lag 2	0.947***	0.584***
	(0.215)	(0.096)
LGDP - Lag 2	-2.650***	-1.067***
	(0.705)	(0.314)
LGDS - Lag 3	-0.431	0.075
	(0.301)	(0.134)
LGDP - Lag 3	1.723^{*}	-0.020
	(0.905)	(0.403)
LGDS - Lag 4	0.133	-0.259*
	(0.306)	(0.136)
LGDP - Lag 4	-1.334	0.125
	(0.873)	(0.389)
LGDS - Lag 5	0.006	0.085
	(0.275)	(0.122)
LGDP - Lag 5	1.009	0.016
	(0.808)	(0.360)
LGDS - Lag 6	0.139	0.077
	(0.268)	(0.119)
LGDP - Lag 6	-0.952	-0.160
	(0.765)	(0.341)
LGDS - Lag 7	-0.313	-0.085
	(0.257)	(0.114)
LGDP - Lag 7	1.348*	0.424
	(0.727)	(0.324)
LGDS - Lag 8	-0.031	-0.097
	(0.254)	(0.113)
LGDP - Lag 8	-0.508	0.030
	(0.732)	(0.326)
LGDS - Lag 9	0.549**	0.134

	(0.245)	(0.109)
LGDP - Lag 9	-0.936	-0.608*
	(0.688)	(0.306)
LGDS - Lag 10	-0.193	0.078
	(0.212)	(0.094)
LGDP - Lag 10	0.724^{*}	0.303
	(0.415)	(0.185)
Constant	0.540	1.219**
	(1.191)	(0.531)
Observations	50	50
R^2	0.974	0.991
Adjusted R ²	0.956	0.986
Residual Std. Error ($df = 29$)	0.251	0.112
F Statistic (df = 20; 29)	54.384***	168.728***

VAR(10) Model - Colombia

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.997***	0.070
	(0.290)	(0.190)
LGDP - Lag 1	-0.138	0.944***
	(0.435)	(0.284)
LGDS - Lag 2	0.006	0.045
	(0.399)	(0.261)
LGDP - Lag 2	-0.191	-0.111
	(0.641)	(0.419)
LGDS - Lag 3	-0.160	-0.153
	(0.394)	(0.258)
LGDP - Lag 3	0.556	0.265
	(0.633)	(0.414)
LGDS - Lag 4	0.025	0.105
	(0.381)	(0.249)
LGDP - Lag 4	-0.332	-0.308
	(0.631)	(0.413)
LGDS - Lag 5	0.133	0.031
	(0.371)	(0.242)

LGDP - Lag 5	-0.228	-0.100
-	(0.633)	(0.414)
LGDS - Lag 6	-0.137	0.114
	(0.371)	(0.243)
LGDP - Lag 6	0.915	0.331
	(0.602)	(0.393)
LGDS - Lag 7	-0.354	-0.367
	(0.369)	(0.241)
LGDP - Lag 7	-0.159	0.170
	(0.602)	(0.394)
LGDS - Lag 8	-0.022	-0.042
	(0.338)	(0.221)
LGDP - Lag 8	-0.137	-0.240
	(0.592)	(0.387)
LGDS - Lag 9	0.356	0.186
	(0.338)	(0.221)
LGDP - Lag 9	-0.871	-0.555
	(0.595)	(0.389)
LGDS - Lag 10	-0.419	-0.086
	(0.266)	(0.174)
LGDP - Lag 10	1.118***	0.683**
	(0.392)	(0.256)
Constant	-0.526	0.075
	(0.406)	(0.266)
Observations	50	50
\mathbb{R}^2	0.986	0.994
Adjusted R ²	0.976	0.990
Residual Std. Error ($df = 29$)	0.137	0.089
F Statistic (df = 20; 29)	101.623***	248.346***

VAR(10) Model - Costa Rica

	Dependen	Dependent Variable	
	LGDS	LGDP	
LGDS - Lag 1	0.523**	-0.137	
	(0.208)	(0.167)	
LGDP - Lag 1	0.315	1.166***	

	(0.250)	(0.200)
LGDS - Lag 2	-0.284	-0.058
	(0.244)	(0.195)
LGDP - Lag 2	0.055	-0.009
	(0.378)	(0.302)
LGDS - Lag 3	0.276	0.022
	(0.239)	(0.191)
LGDP - Lag 3	-0.056	-0.144
	(0.355)	(0.283)
LGDS - Lag 4	-0.071	-0.267
	(0.243)	(0.194)
LGDP - Lag 4	0.080	0.017
	(0.319)	(0.255)
LGDS - Lag 5	0.055	-0.010
	(0.202)	(0.161)
LGDP - Lag 5	-0.137	0.082
	(0.310)	(0.248)
LGDS - Lag 6	0.030	0.128
	(0.198)	(0.158)
LGDP - Lag 6	0.283	0.104
	(0.303)	(0.242)
LGDS - Lag 7	0.169	0.471***
	(0.200)	(0.160)
LGDP - Lag 7	-0.192	-0.171
	(0.304)	(0.243)
LGDS - Lag 8	-0.369*	-0.428**
	(0.212)	(0.170)
LGDP - Lag 8	0.222	0.061
	(0.303)	(0.242)
LGDS - Lag 9	0.321	0.017
	(0.232)	(0.186)
LGDP - Lag 9	-0.056	-0.075
	(0.301)	(0.240)
LGDS - Lag 10	-0.226	0.014
	(0.179)	(0.143)
LGDP - Lag 10	0.055	0.201
	(0.219)	(0.175)
Constant	-0.809*	-0.168

	(0.453)	(0.362)
Observations	50	50
R^2	0.987	0.991
Adjusted R ²	0.978	0.985
Residual Std. Error ($df = 29$)	0.139	0.111
F Statistic (df = 20; 29)	108.411***	164.438***

VAR(10) Model - Cote d'Ivoire

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	1.242***	0.290**
	(0.226)	(0.112)
LGDP - Lag 1	-0.058	0.689***
	(0.424)	(0.211)
LGDS - Lag 2	-0.279	0.230
	(0.316)	(0.157)
LGDP - Lag 2	0.238	-0.070
	(0.513)	(0.255)
LGDS - Lag 3	-0.050	-0.265
	(0.323)	(0.160)
LGDP - Lag 3	-0.260	0.146
	(0.509)	(0.253)
LGDS - Lag 4	-0.057	-0.060
	(0.334)	(0.166)
LGDP - Lag 4	0.188	-0.187
	(0.500)	(0.249)
LGDS - Lag 5	-0.035	0.143
	(0.323)	(0.161)
LGDP - Lag 5	0.184	0.178
	(0.497)	(0.247)
LGDS - Lag 6	-0.045	-0.149
	(0.317)	(0.158)
LGDP - Lag 6	0.128	0.069
	(0.485)	(0.241)
LGDS - Lag 7	-0.152	0.096
	(0.322)	(0.160)

LGDP - Lag 7	-0.163 (0.476)	
LGDS - Lag 8	0.362	0.067
LGDP - Lag 8	(0.313) -0.473	, ,
. CDG	(0.476)	, ,
LGDS - Lag 9	-0.044 (0.310)	
LGDP - Lag 9	0.248 (0.483)	0.086 (0.240)
LGDS - Lag 10	-0.120	-0.117
LGDP - Lag 10	(0.217) 0.062	
	(0.342)	(0.170)
Constant	0.297 (0.446)	
Observations	50	50
R^2	0.909	0.973
Adjusted R ²	0.847	0.955
Residual Std. Error ($df = 29$)	0.196	0.097
F Statistic (df = 20; 29)	14.572***	52.984***

VAR(10) Model - Cuba

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.861***	0.071
	(0.201)	(0.073)
LGDP - Lag 1	1.062^{*}	1.253***
	(0.588)	(0.214)
LGDS - Lag 2	-0.119	-0.157
	(0.259)	(0.094)
LGDP - Lag 2	0.253	-0.399
	(0.857)	(0.312)
LGDS - Lag 3	-0.198	0.116
	(0.267)	(0.097)
LGDP - Lag 3	-1.358	0.046

	(0.879)	(0.320)
LGDS - Lag 4	0.020	0.017
	(0.257)	(0.093)
LGDP - Lag 4	1.324	0.236
	(0.923)	(0.336)
LGDS - Lag 5	0.032	0.029
	(0.245)	(0.089)
LGDP - Lag 5	-1.564	-0.314
	(0.944)	(0.344)
LGDS - Lag 6	0.188	-0.055
	(0.241)	(0.088)
LGDP - Lag 6	1.571	0.234
	(0.958)	(0.349)
LGDS - Lag 7	-0.393	-0.008
	(0.242)	(0.088)
LGDP - Lag 7	-0.663	-0.283
	(0.993)	(0.361)
LGDS - Lag 8	0.124	-0.007
	(0.228)	(0.083)
LGDP - Lag 8	-0.291	0.349
	(0.931)	(0.339)
LGDS - Lag 9	0.409^{*}	0.051
	(0.236)	(0.086)
LGDP - Lag 9	-0.002	-0.332
	(0.839)	(0.305)
LGDS - Lag 10	-0.334*	-0.057
	(0.174)	(0.063)
LGDP - Lag 10	0.099	0.163
	(0.501)	(0.182)
Constant	-1.151*	0.401^{*}
	(0.579)	(0.211)
Observations	50	50
R^2	0.942	0.989
Adjusted R ²	0.902	0.982
Residual Std. Error ($df = 29$)	0.239	0.087
F Statistic (df = 20; 29)	23.451***	131.957***
17	,	

VAR(10) Model - Cyprus

	Dependen	ıt Variable
	LGDS	LGDP
LGDS - Lag 1	0.213	-0.135
	(0.869)	(0.338)
LGDP - Lag 1	0.712	1.218
	(2.230)	(0.868)
LGDS - Lag 2	0.614	0.301
	(1.009)	(0.393)
LGDP - Lag 2	-1.675	-0.993
	(3.139)	(1.222)
LGDS - Lag 3	0.080	-0.104
	(1.009)	(0.393)
LGDP - Lag 3	0.332	0.538
	(3.238)	(1.260)
LGDS - Lag 4	-0.153	-0.095
	(1.048)	(0.408)
LGDP - Lag 4	0.390	0.171
	(3.327)	(1.295)
LGDS - Lag 5	0.356	0.136
	(0.974)	(0.379)
LGDP - Lag 5	-1.164	-0.613
	(3.116)	(1.212)
LGDS - Lag 6	-0.497	-0.105
	(0.845)	(0.329)
LGDP - Lag 6	2.049	0.754
	(2.579)	(1.003)
LGDS - Lag 7	-0.207	-0.041
	(0.858)	(0.334)
LGDP - Lag 7	-0.059	-0.166
	(2.487)	(0.968)
LGDS - Lag 8	-0.133	-0.040
	(0.814)	(0.317)
LGDP - Lag 8	0.357	0.221
	(2.371)	(0.923)
LGDS - Lag 9	0.006	0.019

(0.797)	(0.310)
-0.232	-0.115
(2.351)	(0.915)
-0.083	-0.071
(0.518)	(0.201)
0.025	0.079
(1.360)	(0.529)
-0.475	0.278
(1.926)	(0.749)
50	50
0.718	0.936
0.523	0.892
0.836	0.325
3.689***	21.280***
	-0.232 (2.351) -0.083 (0.518) 0.025 (1.360) -0.475 (1.926) 50 0.718 0.523 0.836

VAR(10) Model - Denmark

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.820	-0.159
	(0.546)	(0.451)
LGDP - Lag 1	0.159	1.377**
	(0.660)	(0.546)
LGDS - Lag 2	-0.112	0.234
	(0.773)	(0.639)
LGDP - Lag 2	-0.305	-0.805
	(1.051)	(0.869)
LGDS - Lag 3	0.313	0.272
	(0.772)	(0.638)
LGDP - Lag 3	-0.087	-0.001
	(1.061)	(0.877)
LGDS - Lag 4	0.167	-0.063
	(0.647)	(0.535)
LGDP - Lag 4	-0.164	0.088
	(0.861)	(0.712)
LGDS - Lag 5	-0.242	-0.244
	(0.536)	(0.444)

LGDP - Lag 5	0.052	-0.036
	(0.640)	(0.529)
LGDS - Lag 6	0.507	0.715
	(0.540)	(0.446)
LGDP - Lag 6	-0.406	-0.526
	(0.628)	(0.519)
LGDS - Lag 7	-0.383	-0.706
	(0.583)	(0.482)
LGDP - Lag 7	0.408	0.726
	(0.643)	(0.532)
LGDS - Lag 8	0.626	0.760
	(0.624)	(0.516)
LGDP - Lag 8	-0.502	-0.644
	(0.681)	(0.563)
LGDS - Lag 9	-0.879	-0.879*
	(0.607)	(0.502)
LGDP - Lag 9	0.979	0.897
	(0.662)	(0.547)
LGDS - Lag 10	0.150	0.216
	(0.391)	(0.323)
LGDP - Lag 10	-0.201	-0.299
	(0.440)	(0.364)
Constant	1.095*	1.064**
	(0.539)	(0.446)
Observations	50	50
R^2	0.991	0.993
Adjusted R ²	0.985	0.988
Residual Std. Error (df = 29)	0.111	0.092
F Statistic (df = 20; 29)	161.054***	195.686***
		-

VAR(10) Model - Dominican Republic

	Dependen	Dependent Variable	
	LGDS	LGDP	
LGDS - Lag 1	0.653**	0.370**	
	(0.267)	(0.178)	
LGDP - Lag 1	-0.223	0.414	

	(0.386)	(0.257)
LGDS - Lag 2	0.214	
	(0.284)	
LGDP - Lag 2	0.352	0.318
	(0.430)	
LGDS - Lag 3	0.227	-0.005
5	(0.279)	
LGDP - Lag 3	-0.366	0.173
Ç	(0.429)	(0.286)
LGDS - Lag 4	-0.146	-0.275
	(0.250)	(0.167)
LGDP - Lag 4	0.345	0.066
	(0.415)	(0.276)
LGDS - Lag 5	-0.269	-0.054
	(0.237)	(0.158)
LGDP - Lag 5	0.309	-0.076
	(0.410)	(0.273)
LGDS - Lag 6	0.115	0.039
	(0.225)	(0.150)
LGDP - Lag 6	-0.769*	-0.293
	(0.410)	(0.273)
LGDS - Lag 7	-0.176	
	(0.217)	(0.145)
LGDP - Lag 7	0.998**	0.131
	(0.421)	(0.280)
LGDS - Lag 8	0.210	0.158
	(0.223)	
LGDP - Lag 8	-0.754	-0.328
	(0.481)	
LGDS - Lag 9	0.008	-0.057
	(0.212)	(0.141)
LGDP - Lag 9	0.357	0.405
	(0.491)	(0.327)
LGDS - Lag 10	-0.163	-0.212
1 GDD 1 10	(0.191)	(0.127)
LGDP - Lag 10	0.097	0.088
	(0.341)	(0.227)
Constant	-0.603	0.396

	(1.346)	(0.897)
Observations	50	50
R^2	0.964	0.979
Adjusted R ²	0.938	0.964
Residual Std. Error ($df = 29$)	0.258	0.172
F Statistic (df = 20; 29)	38.377***	67.232***

VAR(10) Model - Ecuador

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.673**	0.134
	(0.285)	(0.159)
LGDP - Lag 1	0.336	1.165***
	(0.518)	(0.289)
LGDS - Lag 2	0.196	0.223
	(0.309)	(0.172)
LGDP - Lag 2	-0.505	-0.940**
	(0.736)	(0.410)
LGDS - Lag 3	-0.134	-0.191
	(0.311)	(0.174)
LGDP - Lag 3	0.695	0.843^{*}
	(0.822)	(0.458)
LGDS - Lag 4	0.020	0.089
	(0.306)	(0.171)
LGDP - Lag 4	-0.570	-0.648
	(0.863)	(0.481)
LGDS - Lag 5	-0.225	-0.125
	(0.306)	(0.171)
LGDP - Lag 5	1.067	0.671
	(0.880)	(0.490)
LGDS - Lag 6	-0.099	0.014
	(0.308)	(0.171)
LGDP - Lag 6	-1.005	-0.615
	(0.888)	(0.495)
LGDS - Lag 7	0.044	-0.125
	(0.302)	(0.168)

LGDP - Lag 7	0.671	0.653
(0	0.868)	(0.484)
LGDS - Lag 8	0.017	-0.064
()	0.304)	(0.170)
LGDP - Lag 8	0.489	-0.356
(1)	0.810)	(0.452)
LGDS - Lag 9	0.279	-0.216
()	0.274)	(0.153)
LGDP - Lag 9	0.787	0.464
()	0.674)	(0.375)
LGDS - Lag 10	0.250	-0.057
()	0.262)	(0.146)
LGDP - Lag 10	0.075	0.034
(1)	0.408)	(0.228)
Constant -	1.532	-0.094
	1.202)	(0.670)
Observations	50	50
R^2	0.954	0.982
Adjusted R ²	0.922	0.969
Residual Std. Error (df = 29)	0.218	0.121
F Statistic (df = 20; 29) 30	0.094***	77.335***

VAR(10) Model - El Salvador

Dependent Variable	
LGDS	LGDP
-0.026	-0.006
(0.183)	(0.007)
2.525	1.432***
(4.180)	(0.160)
0.069	-0.014*
(0.183)	(0.007)
-3.518	-0.491*
(7.248)	(0.278)
-0.010	-0.010
(0.196)	(0.008)
1.170	0.332
	LGDS -0.026 (0.183) 2.525 (4.180) 0.069 (0.183) -3.518 (7.248) -0.010 (0.196)

	(7.200)	(0.202)
	(7.390)	
LGDS - Lag 4	-0.061	
	(0.234)	(0.009)
LGDP - Lag 4	4.227	-0.689**
	(7.198)	(0.276)
LGDS - Lag 5	-0.207	0.011
	(0.243)	(0.009)
LGDP - Lag 5	-4.299	0.424^{**}
	(4.947)	(0.190)
LGDS - Lag 6	0.001	-0.008
	(0.268)	(0.010)
LGDP - Lag 6	-0.428	0.041
C	(2.328)	(0.089)
LGDS - Lag 7	-0.157	-0.014
	(0.264)	(0.010)
LGDP - Lag 7	0.917	
2	(2.327)	
LGDS - Lag 8	-0.026	
	(0.271)	
LGDP - Lag 8	-0.114	
2021 2080	(2.298)	
LGDS - Lag 9	-0.240	
	(0.268)	
LGDP - Lag 9	0.947	-0.005
EGDI Eng	(2.296)	
LGDS - Lag 10	0.122	-0.015
LODS - Lag 10	(0.258)	
LCDR Log 10	-1.652	0.079
LGDP - Lag 10	(1.788)	
Comptent		
Constant	7.099*	0.391***
	(3.636)	(0.139)
Observations	50	50
R^2	0.282	0.999
Adjusted R ²	-0.213	0.998
Residual Std. Error (df = 29)	0.940	0.036
F Statistic (df = 20; 29)	0.569	1,155.418***

VAR(10) Model - Eswatini

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.704***	0.013
	(0.189)	(0.025)
LGDP - Lag 1	-0.490	0.915***
	(1.276)	(0.171)
LGDS - Lag 2	0.177	-0.003
	(0.224)	(0.030)
LGDP - Lag 2	-1.369	-0.142
	(1.665)	(0.223)
LGDS - Lag 3	0.005	0.045
	(0.204)	(0.027)
LGDP - Lag 3	0.805	-0.089
	(1.668)	(0.224)
LGDS - Lag 4	-0.116	0.007
	(0.209)	(0.028)
LGDP - Lag 4	0.171	0.205
	(1.683)	(0.226)
LGDS - Lag 5	0.027	-0.002
	(0.205)	(0.027)
LGDP - Lag 5	-0.272	-0.247
	(1.668)	(0.224)
LGDS - Lag 6	0.239	-0.005
	(0.203)	(0.027)
LGDP - Lag 6	0.155	0.173
	(1.662)	(0.223)
LGDS - Lag 7	-0.130	-0.040
	(0.210)	(0.028)
LGDP - Lag 7	1.372	0.426^{*}
	(1.667)	(0.224)
LGDS - Lag 8	-0.083	-0.003
	(0.222)	(0.030)
LGDP - Lag 8	-0.046	-0.362
	(1.657)	(0.222)
LGDS - Lag 9	-0.003	0.050^{*}

	(0.220)	(0.029)
LGDP - Lag 9	-0.810	0.033
	(1.627)	(0.218)
LGDS - Lag 10	-0.069	-0.063**
	(0.177)	(0.024)
LGDP - Lag 10	0.522	0.027
	(1.272)	(0.171)
Constant	1.266	0.516**
	(1.589)	(0.213)
Observations	50	50
\mathbb{R}^2	0.705	0.984
Adjusted R ²	0.502	0.973
Residual Std. Error ($df = 29$)	0.989	0.133
F Statistic (df = 20; 29)	3.472***	90.432***

VAR(10) Model - Finland

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	1.402***	0.220
	(0.405)	(0.302)
LGDP - Lag 1	-0.545	0.922^{**}
	(0.546)	(0.407)
LGDS - Lag 2	-0.685	-0.128
	(0.614)	(0.457)
LGDP - Lag 2	0.641	-0.192
	(0.888)	(0.661)
LGDS - Lag 3	0.181	-0.069
	(0.638)	(0.475)
LGDP - Lag 3	-0.151	0.134
	(0.933)	(0.695)
LGDS - Lag 4	-0.353	-0.237
	(0.658)	(0.490)
LGDP - Lag 4	0.413	0.316
	(0.950)	(0.708)
LGDS - Lag 5	0.251	0.167
	(0.663)	(0.494)

LGDP - Lag 5	-0.643	-0.451
	(0.958)	(0.714)
LGDS - Lag 6	1.013	1.014^{*}
Ç	(0.672)	(0.501)
LGDP - Lag 6	-0.978	-1.021
Ç	(0.972)	(0.724)
LGDS - Lag 7	-0.460	-0.714
_	(0.706)	(0.526)
LGDP - Lag 7	0.709	0.955
	(0.990)	(0.737)
LGDS - Lag 8	-0.362	0.035
	(0.718)	(0.535)
LGDP - Lag 8	0.578	0.123
	(0.998)	(0.743)
LGDS - Lag 9	0.367	0.201
	(0.689)	(0.514)
LGDP - Lag 9	-0.412	-0.421
	(0.966)	(0.720)
LGDS - Lag 10	-0.329	-0.187
	(0.426)	(0.317)
LGDP - Lag 10	0.280	0.286
	(0.540)	(0.402)
Constant	0.968	0.935
	(0.756)	(0.563)
Observations	50	50
\mathbb{R}^2	0.985	0.993
Adjusted R ²	0.975	0.988
Residual Std. Error ($df = 29$)	0.124	0.093
F Statistic (df = 20; 29)	96.790***	206.902***

VAR(10) Model - France

	Dependen	Dependent Variable	
	LGDS	LGDP	
LGDS - Lag 1	1.109*	0.183	
	(0.587)	(0.582)	
LGDP - Lag 1	0.052	1.041^{*}	

	(0.606)	(0.601)
LGDS - Lag 2	-0.517	-0.259
	(0.798)	(0.791)
LGDP - Lag 2	0.137	-0.135
	(0.849)	(0.842)
LGDS - Lag 3	-0.267	-0.379
	(0.806)	(0.800)
LGDP - Lag 3	0.240	0.372
	(0.859)	(0.852)
LGDS - Lag 4	0.613	0.613
	(0.794)	(0.788)
LGDP - Lag 4	-0.321	-0.404
	(0.863)	(0.856)
LGDS - Lag 5	-1.540*	-1.300
	(0.778)	(0.772)
LGDP - Lag 5	1.192	1.046
	(0.879)	(0.872)
LGDS - Lag 6	2.561***	2.131**
	(0.821)	(0.814)
		(0.814)
LGDP - Lag 6	-2.706***	-2.190**
LGDP - Lag 6		-2.190**
LGDP - Lag 6 LGDS - Lag 7	-2.706*** (0.915) -1.273	-2.190** (0.907) -1.099
<u> </u>	-2.706*** (0.915)	-2.190** (0.907) -1.099
<u> </u>	-2.706*** (0.915) -1.273 (0.933) 1.559	-2.190** (0.907) -1.099 (0.926) 1.320
LGDS - Lag 7	-2.706*** (0.915) -1.273 (0.933)	-2.190** (0.907) -1.099 (0.926)
LGDS - Lag 7	-2.706*** (0.915) -1.273 (0.933) 1.559 (1.036) -0.200	-2.190** (0.907) -1.099 (0.926) 1.320 (1.027) -0.136
LGDS - Lag 7 LGDP - Lag 7 LGDS - Lag 8	-2.706*** (0.915) -1.273 (0.933) 1.559 (1.036) -0.200 (0.951)	-2.190** (0.907) -1.099 (0.926) 1.320 (1.027) -0.136 (0.943)
LGDS - Lag 7 LGDP - Lag 7	-2.706*** (0.915) -1.273 (0.933) 1.559 (1.036) -0.200 (0.951) 0.217	-2.190** (0.907) -1.099 (0.926) 1.320 (1.027) -0.136 (0.943) 0.114
LGDS - Lag 7 LGDP - Lag 7 LGDS - Lag 8 LGDP - Lag 8	-2.706*** (0.915) -1.273 (0.933) 1.559 (1.036) -0.200 (0.951) 0.217 (1.065)	-2.190** (0.907) -1.099 (0.926) 1.320 (1.027) -0.136 (0.943) 0.114 (1.057)
LGDS - Lag 7 LGDP - Lag 7 LGDS - Lag 8	-2.706*** (0.915) -1.273 (0.933) 1.559 (1.036) -0.200 (0.951) 0.217 (1.065) 0.882	-2.190** (0.907) -1.099 (0.926) 1.320 (1.027) -0.136 (0.943) 0.114 (1.057) 0.658
LGDS - Lag 7 LGDP - Lag 7 LGDS - Lag 8 LGDP - Lag 8 LGDS - Lag 9	-2.706*** (0.915) -1.273 (0.933) 1.559 (1.036) -0.200 (0.951) 0.217 (1.065) 0.882 (0.905)	-2.190** (0.907) -1.099 (0.926) 1.320 (1.027) -0.136 (0.943) 0.114 (1.057) 0.658 (0.898)
LGDS - Lag 7 LGDP - Lag 7 LGDS - Lag 8 LGDP - Lag 8	-2.706*** (0.915) -1.273 (0.933) 1.559 (1.036) -0.200 (0.951) 0.217 (1.065) 0.882 (0.905) -1.087	-2.190** (0.907) -1.099 (0.926) 1.320 (1.027) -0.136 (0.943) 0.114 (1.057) 0.658 (0.898) -0.864
LGDS - Lag 7 LGDP - Lag 7 LGDS - Lag 8 LGDP - Lag 8 LGDS - Lag 9 LGDP - Lag 9	-2.706*** (0.915) -1.273 (0.933) 1.559 (1.036) -0.200 (0.951) 0.217 (1.065) 0.882 (0.905) -1.087 (1.028)	-2.190** (0.907) -1.099 (0.926) 1.320 (1.027) -0.136 (0.943) 0.114 (1.057) 0.658 (0.898) -0.864 (1.020)
LGDS - Lag 7 LGDP - Lag 7 LGDS - Lag 8 LGDP - Lag 8 LGDS - Lag 9	-2.706*** (0.915) -1.273 (0.933) 1.559 (1.036) -0.200 (0.951) 0.217 (1.065) 0.882 (0.905) -1.087 (1.028) -0.908	-2.190** (0.907) -1.099 (0.926) 1.320 (1.027) -0.136 (0.943) 0.114 (1.057) 0.658 (0.898) -0.864 (1.020) -0.649
LGDS - Lag 7 LGDP - Lag 7 LGDS - Lag 8 LGDP - Lag 8 LGDS - Lag 9 LGDP - Lag 9 LGDS - Lag 10	-2.706*** (0.915) -1.273 (0.933) 1.559 (1.036) -0.200 (0.951) 0.217 (1.065) 0.882 (0.905) -1.087 (1.028) -0.908 (0.561)	-2.190** (0.907) -1.099 (0.926) 1.320 (1.027) -0.136 (0.943) 0.114 (1.057) 0.658 (0.898) -0.864 (1.020) -0.649 (0.556)
LGDS - Lag 7 LGDP - Lag 7 LGDS - Lag 8 LGDP - Lag 8 LGDS - Lag 9 LGDP - Lag 9	-2.706*** (0.915) -1.273 (0.933) 1.559 (1.036) -0.200 (0.951) 0.217 (1.065) 0.882 (0.905) -1.087 (1.028) -0.908 (0.561) 1.145*	-2.190** (0.907) -1.099 (0.926) 1.320 (1.027) -0.136 (0.943) 0.114 (1.057) 0.658 (0.898) -0.864 (1.020) -0.649 (0.556) 0.858
LGDS - Lag 7 LGDP - Lag 7 LGDS - Lag 8 LGDP - Lag 8 LGDS - Lag 9 LGDP - Lag 9 LGDS - Lag 10	-2.706*** (0.915) -1.273 (0.933) 1.559 (1.036) -0.200 (0.951) 0.217 (1.065) 0.882 (0.905) -1.087 (1.028) -0.908 (0.561)	-2.190** (0.907) -1.099 (0.926) 1.320 (1.027) -0.136 (0.943) 0.114 (1.057) 0.658 (0.898) -0.864 (1.020) -0.649 (0.556)

	(0.349)	(0.347)
Observations	50	50
\mathbb{R}^2	0.988	0.990
Adjusted R ²	0.979	0.983
Residual Std. Error ($df = 29$)	0.101	0.100
F Statistic (df = 20; 29)	117.878***	142.064***

VAR(10) Model - Gabon

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.386	0.030
	(0.258)	(0.157)
LGDP - Lag 1	1.082**	1.083***
	(0.455)	(0.278)
LGDS - Lag 2	-0.044	-0.069
	(0.271)	(0.165)
LGDP - Lag 2	-0.644	-0.286
	(0.569)	(0.347)
LGDS - Lag 3	0.047	0.218
	(0.247)	(0.150)
LGDP - Lag 3	0.151	-0.106
	(0.573)	(0.349)
LGDS - Lag 4	0.036	0.036
	(0.254)	(0.155)
LGDP - Lag 4	-0.002	-0.170
	(0.579)	(0.353)
LGDS - Lag 5	0.044	0.045
	(0.249)	(0.152)
LGDP - Lag 5	0.069	-0.058
	(0.563)	(0.343)
LGDS - Lag 6	0.231	0.007
	(0.241)	(0.147)
LGDP - Lag 6	-0.259	0.196
	(0.536)	(0.326)
LGDS - Lag 7	-0.620**	-0.245
	(0.239)	(0.146)

LGDP - Lag 7	0.411 (0.519)	0.072 (0.316)
LGDS - Lag 8	0.175	, ,
	(0.255)	(0.155)
LGDP - Lag 8	0.215	-0.159
	(0.502)	(0.306)
LGDS - Lag 9	0.056	-0.067
	(0.247)	(0.150)
LGDP - Lag 9	-0.386	-0.091
	(0.519)	(0.316)
LGDS - Lag 10	-0.135	0.054
	(0.202)	(0.123)
LGDP - Lag 10	0.196	0.126
	(0.359)	(0.219)
Constant	-0.714	1.821^{*}
	(1.612)	(0.982)
Observations	50	50
R^2	0.908	0.957
Adjusted R ²	0.844	0.927
Residual Std. Error ($df = 29$)	0.287	0.175
F Statistic (df = 20; 29)	14.274***	32.171***

VAR(10) Model - Gambia, The

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.383**	0.025
	(0.185)	(0.026)
LGDP - Lag 1	0.457	0.864^{***}
	(1.299)	(0.182)
LGDS - Lag 2	-0.060	-0.015
	(0.198)	(0.028)
LGDP - Lag 2	-0.326	-0.074
	(1.696)	(0.238)
LGDS - Lag 3	-0.126	0.024
	(0.199)	(0.028)
LGDP - Lag 3	1.066	0.216

	(1.631)	(0.229)
LGDS - Lag 4	0.032	0.001
	(0.185)	(0.026)
LGDP - Lag 4	-2.066	-0.076
	(1.602)	(0.225)
LGDS - Lag 5	0.262	0.022
	(0.168)	(0.024)
LGDP - Lag 5	-0.281	-0.136
	(1.606)	(0.226)
LGDS - Lag 6	-0.114	-0.023
	(0.175)	(0.025)
LGDP - Lag 6	4.661***	0.103
	(1.592)	(0.224)
LGDS - Lag 7	0.260	0.007
	(0.173)	(0.024)
LGDP - Lag 7	-2.810	-0.390
	(1.814)	(0.255)
LGDS - Lag 8	-0.069	-0.011
	(0.181)	(0.025)
LGDP - Lag 8	0.069	0.360
	(1.945)	(0.273)
LGDS - Lag 9	-0.054	0.011
	(0.173)	(0.024)
LGDP - Lag 9	-0.597	-0.197
	(1.995)	(0.280)
LGDS - Lag 10	-0.101	-0.0005
	(0.161)	(0.023)
LGDP - Lag 10	0.171	0.213
	(1.405)	(0.197)
Constant	-0.724	0.674^{*}
	(2.476)	(0.348)
Observations	50	50
\mathbb{R}^2	0.513	0.938
Adjusted R ²	0.178	0.895
Residual Std. Error (df = 29)	1.358	0.191
F Statistic (df = 20; 29)	1.530	21.913***
N_{oto} , $*_n < 0.1$, $*_n < 0.05$, $*_n < 0.01$		

VAR(10) Model - Germany

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	1.462***	0.714*
	(0.457)	(0.382)
LGDP - Lag 1	-0.190	0.578
	(0.541)	(0.453)
LGDS - Lag 2	-1.112*	-0.965*
	(0.580)	(0.485)
LGDP - Lag 2	0.473	0.449
	(0.681)	(0.569)
LGDS - Lag 3	0.568	0.376
	(0.601)	(0.503)
LGDP - Lag 3	-0.182	-0.146
	(0.683)	(0.572)
LGDS - Lag 4	-0.122	-0.119
	(0.600)	(0.502)
LGDP - Lag 4	0.159	0.129
	(0.674)	(0.564)
LGDS - Lag 5	-0.856	-0.679
	(0.582)	(0.487)
LGDP - Lag 5	0.363	0.338
	(0.692)	(0.579)
LGDS - Lag 6	2.280***	1.875***
	(0.589)	(0.493)
LGDP - Lag 6	-2.090***	-1.752***
	(0.701)	(0.587)
LGDS - Lag 7	-1.660 ^{**}	-1.452**
	(0.693)	(0.580)
LGDP - Lag 7	1.684**	1.539**
	(0.786)	(0.658)
LGDS - Lag 8	0.506	0.334
	(0.700)	(0.585)
LGDP - Lag 8	-0.129	-0.045
	(0.792)	(0.662)
LGDS - Lag 9	0.126	0.165

	(0.718)	(0.601)
LGDP - Lag 9	-0.631	-0.645
	(0.798)	(0.668)
LGDS - Lag 10	-0.466	-0.249
	(0.485)	(0.405)
LGDP - Lag 10	0.753	0.488
	(0.540)	(0.452)
Constant	0.343	0.731**
	(0.385)	(0.322)
Observations	50	50
\mathbb{R}^2	0.991	0.993
Adjusted R ²	0.984	0.987
Residual Std. Error ($df = 29$)	0.107	0.090
F Statistic (df = 20; 29)	153.806***	193.401***

VAR(10) Model - Greece

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.741**	0.038
	(0.289)	(0.175)
LGDP - Lag 1	0.295	1.302***
	(0.484)	(0.293)
LGDS - Lag 2	0.205	0.149
	(0.344)	(0.208)
LGDP - Lag 2	-0.552	-0.637
	(0.717)	(0.434)
LGDS - Lag 3	0.023	-0.181
	(0.345)	(0.209)
LGDP - Lag 3	-0.010	0.222
	(0.730)	(0.442)
LGDS - Lag 4	0.053	0.184
	(0.349)	(0.211)
LGDP - Lag 4	0.291	-0.001
	(0.741)	(0.448)
LGDS - Lag 5	-0.467	-0.270
	(0.363)	(0.220)

LGDP - Lag 5	0.060	0.121
	(0.771)	(0.467)
LGDS - Lag 6	0.705^{*}	0.516**
	(0.369)	(0.223)
LGDP - Lag 6	-0.975	-0.789
	(0.778)	(0.471)
LGDS - Lag 7	-0.013	-0.097
	(0.396)	(0.239)
LGDP - Lag 7	0.496	0.416
	(0.775)	(0.469)
LGDS - Lag 8	-0.264	-0.296
	(0.382)	(0.231)
LGDP - Lag 8	0.271	0.468
	(0.772)	(0.467)
LGDS - Lag 9	-0.141	0.002
	(0.344)	(0.208)
LGDP - Lag 9	0.223	-0.291
	(0.751)	(0.455)
LGDS - Lag 10	0.016	0.062
	(0.259)	(0.157)
LGDP - Lag 10	-0.076	0.076
	(0.438)	(0.265)
Constant	0.928^{**}	0.333
	(0.400)	(0.242)
Observations	50	50
R^2	0.951	0.993
Adjusted R ²	0.918	0.988
Residual Std. Error (df = 29)	0.148	0.090
F Statistic (df = 20; 29)	28.379***	205.441***

VAR(10) Model - Guatemala

	Depende	Dependent Variable	
	LGDS	LGDP	
LGDS - Lag 1	0.489**	-0.017	
	(0.178)	(0.066)	
LGDP - Lag 1	0.577	1.091***	

	(0.501)	(0.186)
LGDS - Lag 2	0.165	-0.034
	(0.198)	(0.074)
LGDP - Lag 2	-0.114	-0.144
	(0.730)	(0.271)
LGDS - Lag 3	-0.042	0.014
	(0.197)	(0.073)
LGDP - Lag 3	-0.298	0.297
	(0.729)	(0.270)
LGDS - Lag 4	0.131	0.031
	(0.200)	(0.074)
LGDP - Lag 4	0.631	0.056
	(0.739)	(0.274)
LGDS - Lag 5	0.231	0.032
	(0.202)	(0.075)
LGDP - Lag 5	-1.288*	-0.567**
	(0.743)	(0.275)
LGDS - Lag 6	-0.146	-0.006
	(0.203)	(0.075)
LGDP - Lag 6	0.223	0.220
	(0.751)	(0.279)
LGDS - Lag 7	-0.144	-0.023
	(0.206)	(0.076)
LGDP - Lag 7	0.526	-0.234
	(0.749)	(0.278)
LGDS - Lag 8	-0.171	-0.028
	(0.205)	(0.076)
LGDP - Lag 8	-0.625	0.177
	(0.747)	(0.277)
LGDS - Lag 9	0.064	-0.052
	(0.197)	(0.073)
LGDP - Lag 9	1.351*	0.107
	(0.758)	(0.281)
LGDS - Lag 10	0.028	0.018
	(0.182)	(0.067)
LGDP - Lag 10	-0.855	0.016
	(0.531)	
Constant	0.860^{*}	0.225

	(0.465)	(0.172)
Observations	50	50
\mathbb{R}^2	0.764	0.991
Adjusted R ²	0.600	0.984
Residual Std. Error ($df = 29$)	0.231	0.086
F Statistic (df = 20; 29)	4.682***	156.427***

VAR(10) Model - Honduras

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.695***	-0.024
	(0.194)	(0.052)
LGDP - Lag 1	0.744	1.288***
	(0.703)	(0.189)
LGDS - Lag 2	-0.423*	-0.037
	(0.238)	(0.064)
LGDP - Lag 2	-0.366	-0.095
	(1.139)	(0.307)
LGDS - Lag 3	0.327	-0.057
	(0.242)	(0.065)
LGDP - Lag 3	-0.072	-0.280
	(1.136)	(0.306)
LGDS - Lag 4	-0.032	0.006
	(0.259)	(0.070)
LGDP - Lag 4	-0.336	0.308
	(1.150)	(0.310)
LGDS - Lag 5	0.453^{*}	0.064
	(0.251)	(0.068)
LGDP - Lag 5	-1.438	-0.223
	(1.209)	(0.326)
LGDS - Lag 6	-0.249	-0.076
	(0.314)	(0.085)
LGDP - Lag 6	1.515	-0.176
	(1.241)	(0.334)
LGDS - Lag 7	0.310	0.205
	(0.494)	(0.133)

LCDD Log 7	0.252	0.122
LGDP - Lag 7	-0.353	-0.123
	(1.233)	(0.332)
LGDS - Lag 8	-0.735	-0.048
	(0.568)	(0.153)
LGDP - Lag 8	0.448	0.283
	(1.038)	(0.279)
LGDS - Lag 9	0.186	-0.168
	(0.560)	(0.151)
LGDP - Lag 9	0.909	0.045
	(1.052)	(0.283)
LGDS - Lag 10	-0.049	0.087
	(0.383)	(0.103)
LGDP - Lag 10	-0.743	-0.047
	(0.686)	(0.185)
Constant	0.355	0.387**
	(0.687)	(0.185)
Observations	50	50
\mathbb{R}^2	0.748	0.985
Adjusted R ²	0.575	0.975
Residual Std. Error ($df = 29$)	0.357	0.096
F Statistic (df = 20; 29)	4.309***	96.600***

VAR(10) Model - Hong Kong SAR, China

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.883**	0.008
	(0.420)	(0.239)
LGDP - Lag 1	0.033	1.335***
	(0.730)	(0.416)
LGDS - Lag 2	0.054	0.105
	(0.538)	(0.306)
LGDP - Lag 2	-0.129	-0.556
	(1.176)	(0.670)
LGDS - Lag 3	-0.175	-0.188
	(0.498)	(0.284)
LGDP - Lag 3	0.696	0.430

	(1.090)	(0.621)
LGDS - Lag 4	-0.001	-0.062
	(0.486)	(0.277)
LGDP - Lag 4	-0.617	-0.020
	(1.035)	(0.590)
LGDS - Lag 5	0.719^{*}	0.303
	(0.422)	(0.240)
LGDP - Lag 5	-1.261	-0.779
	(1.000)	(0.570)
LGDS - Lag 6	-0.435	-0.156
	(0.396)	(0.226)
LGDP - Lag 6	1.330	0.684
	(0.952)	(0.542)
LGDS - Lag 7	-0.231	-0.214
	(0.369)	(0.210)
LGDP - Lag 7	0.386	0.326
	(0.907)	(0.517)
LGDS - Lag 8	0.424	0.510**
	(0.370)	(0.211)
LGDP - Lag 8	-1.013	-1.133**
	(0.884)	(0.504)
LGDS - Lag 9	0.105	-0.091
	(0.398)	(0.227)
LGDP - Lag 9	0.052	0.357
	(0.960)	(0.547)
LGDS - Lag 10	-0.231	-0.090
-	(0.237)	(0.135)
LGDP - Lag 10	0.333	0.194
-	(0.507)	(0.289)
Constant	0.975	0.579
	(0.671)	(0.383)
Observations	50	50
R ²	0.994	0.998
Adjusted R ²	0.990	0.997
Residual Std. Error (df = 29)	0.108	0.062
F Statistic (df = 20; 29)	237.478***	788.475***
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VAR(10) Model - Iceland

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	1.081***	0.426*
	(0.271)	(0.232)
LGDP - Lag 1	0.367	1.116***
	(0.330)	(0.282)
LGDS - Lag 2	-0.695*	-0.759**
	(0.346)	(0.296)
LGDP - Lag 2	-0.081	-0.185
	(0.427)	(0.365)
LGDS - Lag 3	0.769^{**}	0.667^{**}
	(0.371)	(0.317)
LGDP - Lag 3	-0.522	-0.408
	(0.423)	(0.362)
LGDS - Lag 4	-0.453	-0.466
	(0.384)	(0.328)
LGDP - Lag 4	0.594	0.647^{*}
	(0.382)	(0.327)
LGDS - Lag 5	-0.226	-0.241
	(0.374)	(0.320)
LGDP - Lag 5	-0.521	-0.388
	(0.384)	(0.328)
LGDS - Lag 6	0.936^{**}	0.905***
	(0.365)	(0.312)
LGDP - Lag 6	0.012	
	(0.392)	, ,
LGDS - Lag 7	-0.805**	-1.070***
	(0.386)	(0.330)
LGDP - Lag 7	0.290	0.643^{*}
	(0.388)	(0.332)
LGDS - Lag 8	0.342	0.446
	(0.459)	(0.392)
LGDP - Lag 8	-0.203	
	(0.412)	(0.352)
LGDS - Lag 9	0.351	0.508

	(0.464)	(0.397)
LGDP - Lag 9	-0.468	-0.610*
	(0.391)	(0.334)
LGDS - Lag 10	-0.619*	-0.398
	(0.354)	(0.303)
LGDP - Lag 10	0.762^{**}	0.530^{*}
	(0.314)	(0.268)
Constant	0.519^{*}	0.680^{***}
	(0.258)	(0.221)
Observations	50	50
\mathbb{R}^2	0.988	0.993
Adjusted R ²	0.980	0.988
Residual Std. Error ($df = 29$)	0.110	0.094
F Statistic (df = 20; 29)	118.244***	198.667***

VAR(10) Model - India

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	1.240***	0.289
	(0.252)	(0.175)
LGDP - Lag 1	-0.555	0.686^{**}
	(0.380)	(0.264)
LGDS - Lag 2	-0.228	-0.235
	(0.300)	(0.209)
LGDP - Lag 2	0.867^{*}	0.455
	(0.469)	(0.326)
LGDS - Lag 3	-0.084	-0.022
	(0.226)	(0.157)
LGDP - Lag 3	-0.278	-0.096
	(0.412)	(0.287)
LGDS - Lag 4	0.099	0.048
	(0.205)	(0.142)
LGDP - Lag 4	-0.181	-0.174
	(0.359)	(0.250)
LGDS - Lag 5	0.246	0.155
	(0.203)	(0.141)

LGDP - Lag 5	-0.145	
	(0.341)	(0.238)
LGDS - Lag 6	-0.313	-0.287*
	(0.206)	(0.144)
LGDP - Lag 6	0.017	0.358
	(0.343)	(0.238)
LGDS - Lag 7	0.058	0.033
	(0.217)	(0.151)
LGDP - Lag 7	0.398	0.343
	(0.355)	(0.247)
LGDS - Lag 8	0.003	-0.070
<u> </u>	(0.211)	(0.147)
LGDP - Lag 8	0.138	-0.295
<u> </u>	(0.355)	(0.247)
LGDS - Lag 9	-0.095	0.177
-	(0.200)	(0.139)
LGDP - Lag 9	-0.498	-0.162
<u> </u>	(0.372)	(0.259)
LGDS - Lag 10	0.280	0.074
-	(0.178)	(0.124)
LGDP - Lag 10	-0.112	-0.115
	(0.309)	(0.215)
Constant	1.265	0.857
	(0.761)	(0.530)
Observations	50	50
R ²	0.995	0.995
Adjusted R ²	0.991	0.992
Residual Std. Error (df = 29)	0.110	0.076
F Statistic (df = 20 ; 29)	285.511***	
	200.011	

VAR(10) Model - Indonesia

	Dependen	Dependent Variable	
	LGDS	LGDP	
LGDS - Lag 1	0.886**	0.248	
	(0.339)	(0.300)	
LGDP - Lag 1	0.421	0.731**	

	(0.400)	(0.354)
LGDS - Lag 2	-0.469	-0.050
	(0.416)	(0.368)
LGDP - Lag 2	-0.364	-0.176
	(0.437)	(0.386)
LGDS - Lag 3	0.288	0.055
	(0.412)	(0.364)
LGDP - Lag 3	0.593	0.284
	(0.433)	(0.383)
LGDS - Lag 4	0.186	-0.053
	(0.373)	(0.330)
LGDP - Lag 4	-0.601	-0.059
	(0.435)	(0.385)
LGDS - Lag 5	-0.673*	-0.273
	(0.360)	(0.319)
LGDP - Lag 5	0.816^{*}	0.279
	(0.471)	(0.417)
LGDS - Lag 6	0.666^{*}	0.301
	(0.378)	(0.334)
LGDP - Lag 6	-0.575	-0.322
	(0.482)	(0.426)
LGDS - Lag 7	-0.591	-0.234
	(0.392)	(0.347)
LGDP - Lag 7	0.160	0.097
	(0.469)	(0.415)
LGDS - Lag 8	0.304	0.125
	(0.364)	(0.322)
LGDP - Lag 8	0.087	0.021
	(0.413)	(0.365)
LGDS - Lag 9	-0.088	-0.179
	(0.281)	(0.249)
LGDP - Lag 9	-0.211	0.070
	(0.335)	(0.297)
LGDS - Lag 10	0.037	0.106
	(0.201)	
LGDP - Lag 10	0.178	0.017
	(0.281)	
Constant	-0.816	0.222

	(0.667)	(0.591)
Observations	50	50
R^2	0.981	0.978
Adjusted R ²	0.968	0.964
Residual Std. Error ($df = 29$)	0.228	0.201
F Statistic (df = 20; 29)	74.277***	65.918***

VAR(10) Model - Iran, Islamic Rep.

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.723***	0.076
	(0.247)	(0.133)
LGDP - Lag 1	0.711	1.025***
	(0.431)	(0.233)
LGDS - Lag 2	0.066	-0.178
	(0.314)	(0.170)
LGDP - Lag 2	-1.177**	-0.121
	(0.546)	(0.295)
LGDS - Lag 3	0.556^{*}	0.229
	(0.324)	(0.175)
LGDP - Lag 3	-0.055	-0.195
	(0.590)	(0.318)
LGDS - Lag 4	-0.695**	-0.224
	(0.329)	(0.178)
LGDP - Lag 4	0.343	0.120
	(0.585)	(0.316)
LGDS - Lag 5	0.416	0.388^{**}
	(0.347)	(0.188)
LGDP - Lag 5	0.051	-0.437
	(0.569)	(0.308)
LGDS - Lag 6	-0.165	-0.123
	(0.368)	(0.199)
LGDP - Lag 6	-0.086	0.301
	(0.558)	(0.301)
LGDS - Lag 7	0.443	0.112
	(0.346)	(0.187)

LGDP - Lag 7	-0.697	-0.249
	(0.579)	(0.313)
LGDS - Lag 8	-0.267	-0.170
	(0.342)	(0.185)
LGDP - Lag 8	0.422	0.040
	(0.596)	(0.322)
LGDS - Lag 9	0.191	0.149
	(0.336)	(0.181)
LGDP - Lag 9	0.289	0.345
	(0.585)	(0.316)
LGDS - Lag 10	-0.007	0.100
	(0.285)	(0.154)
LGDP - Lag 10	-0.295	-0.401*
	(0.416)	(0.225)
Constant	2.230^{*}	2.158***
	(1.249)	(0.675)
Observations	50	50
\mathbb{R}^2	0.935	0.971
Adjusted R ²	0.891	0.952
Residual Std. Error ($df = 29$)	0.282	0.152
F Statistic (df = 20; 29)	20.985***	49.365***

VAR(10) Model - Iraq

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.489*	-0.008
	(0.263)	(0.120)
LGDP - Lag 1	-0.080	0.698^{**}
	(0.603)	(0.275)
LGDS - Lag 2	-0.150	-0.017
	(0.291)	(0.133)
LGDP - Lag 2	1.007	0.272
	(0.736)	(0.336)
LGDS - Lag 3	0.467	0.054
	(0.291)	(0.133)
LGDP - Lag 3	-1.589**	-0.379

	(0.723)	(0.330)
LGDS - Lag 4	-0.350	-0.109
	(0.311)	(0.142)
LGDP - Lag 4	1.026	0.308
	(0.753)	(0.343)
LGDS - Lag 5	0.061	0.044
	(0.313)	(0.142)
LGDP - Lag 5	0.181	0.056
	(0.760)	(0.346)
LGDS - Lag 6	0.322	0.125
	(0.307)	(0.140)
LGDP - Lag 6	-0.833	-0.262
	(0.730)	(0.332)
LGDS - Lag 7	-0.866***	-0.455***
	(0.313)	(0.142)
LGDP - Lag 7	1.270^{*}	0.717^{**}
	(0.738)	(0.336)
LGDS - Lag 8	0.887**	0.507***
	(0.365)	(0.166)
LGDP - Lag 8	-2.108**	-1.042***
	(0.787)	(0.359)
LGDS - Lag 9	0.046	0.051
	(0.407)	(0.185)
LGDP - Lag 9	0.298	0.130
	(0.892)	(0.406)
LGDS - Lag 10	-0.316	-0.036
	(0.307)	(0.140)
LGDP - Lag 10	1.033	0.156
	(0.631)	(0.288)
Constant	1.294	1.734**
	(1.422)	(0.648)
Observations	50	50
R^2	0.716	0.913
Adjusted R ²	0.520	0.852
Residual Std. Error ($df = 29$)	0.639	0.291
F Statistic (df = 20; 29)	3.657***	15.132***
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VAR(10) Model - Ireland

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.664**	0.091
	(0.244)	(0.120)
LGDP - Lag 1	0.083	0.936***
	(0.509)	(0.250)
LGDS - Lag 2	-0.115	0.119
	(0.277)	(0.136)
LGDP - Lag 2	0.352	-0.172
	(0.706)	(0.348)
LGDS - Lag 3	0.013	0.007
	(0.283)	(0.139)
LGDP - Lag 3	-0.213	-0.056
	(0.702)	(0.346)
LGDS - Lag 4	0.402	0.038
	(0.270)	(0.133)
LGDP - Lag 4	-0.302	0.007
	(0.695)	(0.342)
LGDS - Lag 5	-0.481*	-0.159
	(0.278)	(0.137)
LGDP - Lag 5	0.580	0.039
	(0.693)	, ,
LGDS - Lag 6	0.345	0.066
	(0.289)	(0.142)
LGDP - Lag 6	-1.091	
	(0.697)	
LGDS - Lag 7	-0.145	
	(0.282)	
LGDP - Lag 7	0.871	0.357
	(0.721)	
LGDS - Lag 8	-0.266	-0.002
	(0.282)	
LGDP - Lag 8	0.448	0.227
	(0.746)	
LGDS - Lag 9	0.257	-0.017

	(0.270)	(0.133)
LGDP - Lag 9	-0.641	-0.234
	(0.743)	(0.366)
LGDS - Lag 10	-0.106	0.043
	(0.195)	(0.096)
LGDP - Lag 10	0.441	-0.070
	(0.482)	(0.237)
Constant	-1.199	0.922^{**}
	(0.716)	(0.353)
Observations	50	50
\mathbb{R}^2	0.992	0.996
Adjusted R ²	0.987	0.994
Residual Std. Error ($df = 29$)	0.188	0.092
F Statistic (df = 20; 29)	185.904***	401.148***

VAR(10) Model - Israel

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.135	0.089
	(0.209)	(0.103)
LGDP - Lag 1	0.330	0.887***
	(0.408)	(0.200)
LGDS - Lag 2	-0.122	0.034
	(0.200)	(0.098)
LGDP - Lag 2	0.382	-0.191
	(0.508)	(0.250)
LGDS - Lag 3	0.376**	0.066
	(0.182)	(0.090)
LGDP - Lag 3	-0.114	0.007
	(0.496)	(0.243)
LGDS - Lag 4	-0.196	-0.194*
	(0.198)	(0.097)
LGDP - Lag 4	0.379	0.349
	(0.481)	(0.236)
LGDS - Lag 5	0.382^{*}	0.118
	(0.210)	(0.103)

		at.
LGDP - Lag 5	-0.453	-0.490 [*]
	(0.488)	(0.239)
LGDS - Lag 6	-0.089	-0.054
	(0.212)	(0.104)
LGDP - Lag 6	0.266	0.217
	(0.485)	(0.238)
LGDS - Lag 7	0.012	0.063
	(0.205)	(0.100)
LGDP - Lag 7	-0.339	0.020
	(0.481)	(0.236)
LGDS - Lag 8	-0.070	0.096
	(0.191)	(0.094)
LGDP - Lag 8	0.246	-0.080
	(0.471)	(0.231)
LGDS - Lag 9	-0.044	-0.079
	(0.189)	(0.093)
LGDP - Lag 9	0.143	0.388^{*}
	(0.432)	(0.212)
LGDS - Lag 10	-0.069	0.015
	(0.159)	(0.078)
LGDP - Lag 10	-0.005	-0.328**
	(0.319)	(0.156)
Constant	-2.485***	0.968**
	(0.878)	(0.431)
Observations	50	50
R^2	0.981	0.992
Adjusted R ²	0.968	0.987
Residual Std. Error ($df = 29$)	0.194	0.095
F Statistic (df = 20; 29)	74.368***	186.257***

VAR(10) Model - Italy

	Dependen	Dependent Variable	
	LGDS	LGDP	
LGDS - Lag 1	1.129*	0.310	
	(0.566)	(0.506)	
LGDP - Lag 1	0.180	1.041^{*}	

(0.629) -0.323	
	-0.358
(0.718)	
(0.718)	(0.642)
-0.411	-0.283
(0.831)	(0.742)
0.323	0.416
(0.734)	(0.656)
0.012	-0.243
(0.834)	(0.745)
-0.297	-0.159
(0.723)	(0.646)
0.542	0.404
(0.842)	(0.752)
-0.739	-0.856
(0.701)	(0.626)
0.317	0.510
0.517	
(0.800)	
	(0.714)
(0.800)	(0.714) 1.659**
(0.800) 1.465*	(0.714) 1.659** (0.645)
(0.800) 1.465* (0.722)	(0.714) 1.659** (0.645) -1.416*
(0.800) 1.465* (0.722) -1.171	(0.714) 1.659** (0.645) -1.416*
(0.800) 1.465* (0.722) -1.171 (0.781) -1.673**	(0.714) 1.659** (0.645) -1.416* (0.697)
(0.800) 1.465* (0.722) -1.171 (0.781) -1.673**	(0.714) 1.659** (0.645) -1.416* (0.697) -1.650** (0.711)
(0.800) 1.465* (0.722) -1.171 (0.781) -1.673** (0.795)	(0.714) 1.659** (0.645) -1.416* (0.697) -1.650** (0.711)
(0.800) 1.465* (0.722) -1.171 (0.781) -1.673** (0.795) 1.440*	(0.714) 1.659** (0.645) -1.416* (0.697) -1.650** (0.711) 1.473*
(0.800) 1.465* (0.722) -1.171 (0.781) -1.673** (0.795) 1.440* (0.822)	(0.714) 1.659** (0.645) -1.416* (0.697) -1.650** (0.711) 1.473* (0.735) 0.678
(0.800) 1.465* (0.722) -1.171 (0.781) -1.673** (0.795) 1.440* (0.822) 0.719	(0.714) 1.659** (0.645) -1.416* (0.697) -1.650** (0.711) 1.473* (0.735) 0.678
(0.800) 1.465* (0.722) -1.171 (0.781) -1.673** (0.795) 1.440* (0.822) 0.719 (0.824)	(0.714) 1.659** (0.645) -1.416* (0.697) -1.650** (0.711) 1.473* (0.735) 0.678 (0.736) -0.315
(0.800) 1.465* (0.722) -1.171 (0.781) -1.673** (0.795) 1.440* (0.822) 0.719 (0.824) -0.358	(0.714) 1.659** (0.645) -1.416* (0.697) -1.650** (0.711) 1.473* (0.735) 0.678 (0.736) -0.315
(0.800) 1.465* (0.722) -1.171 (0.781) -1.673** (0.795) 1.440* (0.822) 0.719 (0.824) -0.358 (0.820)	(0.714) 1.659** (0.645) -1.416* (0.697) -1.650** (0.711) 1.473* (0.735) 0.678 (0.736) -0.315 (0.733) 0.196
(0.800) 1.465* (0.722) -1.171 (0.781) -1.673** (0.795) 1.440* (0.822) 0.719 (0.824) -0.358 (0.820) 0.391	(0.714) 1.659** (0.645) -1.416* (0.697) -1.650** (0.711) 1.473* (0.735) 0.678 (0.736) -0.315 (0.733) 0.196
(0.800) 1.465* (0.722) -1.171 (0.781) -1.673** (0.795) 1.440* (0.822) 0.719 (0.824) -0.358 (0.820) 0.391 (0.829)	(0.714) 1.659** (0.645) -1.416* (0.697) -1.650** (0.711) 1.473* (0.735) 0.678 (0.736) -0.315 (0.733) 0.196 (0.740)
(0.800) 1.465* (0.722) -1.171 (0.781) -1.673** (0.795) 1.440* (0.822) 0.719 (0.824) -0.358 (0.820) 0.391 (0.829) -0.787 (0.821) 0.187	(0.714) 1.659** (0.645) -1.416* (0.697) -1.650** (0.711) 1.473* (0.735) 0.678 (0.736) -0.315 (0.733) 0.196 (0.740) -0.645 (0.733) 0.318
(0.800) 1.465* (0.722) -1.171 (0.781) -1.673** (0.795) 1.440* (0.822) 0.719 (0.824) -0.358 (0.820) 0.391 (0.829) -0.787 (0.821)	(0.714) 1.659** (0.645) -1.416* (0.697) -1.650** (0.711) 1.473* (0.735) 0.678 (0.736) -0.315 (0.733) 0.196 (0.740) -0.645 (0.733) 0.318
(0.800) 1.465* (0.722) -1.171 (0.781) -1.673** (0.795) 1.440* (0.822) 0.719 (0.824) -0.358 (0.820) 0.391 (0.829) -0.787 (0.821) 0.187 (0.714) 0.027	(0.714) 1.659** (0.645) -1.416* (0.697) -1.650** (0.711) 1.473* (0.735) 0.678 (0.736) -0.315 (0.733) 0.196 (0.740) -0.645 (0.733) 0.318 (0.638) -0.079
(0.800) 1.465* (0.722) -1.171 (0.781) -1.673** (0.795) 1.440* (0.822) 0.719 (0.824) -0.358 (0.820) 0.391 (0.829) -0.787 (0.821) 0.187 (0.714)	(0.714) 1.659** (0.645) -1.416* (0.697) -1.650** (0.711) 1.473* (0.735) 0.678 (0.736) -0.315 (0.733) 0.196 (0.740) -0.645 (0.733) 0.318 (0.638) -0.079
	0.323 (0.734) 0.012 (0.834) -0.297 (0.723) 0.542 (0.842) -0.739 (0.701)

	(0.542)	(0.484)
Observations	50	50
R^2	0.989	0.993
Adjusted R ²	0.982	0.987
Residual Std. Error ($df = 29$)	0.109	0.097
F Statistic (df = 20; 29)	131.098***	193.239***

VAR(10) Model - Japan

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.448	-0.070
	(0.265)	(0.175)
LGDP - Lag 1	0.813^{*}	1.280***
	(0.423)	(0.280)
LGDS - Lag 2	0.122	0.209
	(0.305)	(0.201)
LGDP - Lag 2	-0.488	-0.518
	(0.558)	(0.369)
LGDS - Lag 3	0.108	0.126
	(0.309)	(0.204)
LGDP - Lag 3	-0.216	-0.350
	(0.556)	(0.367)
LGDS - Lag 4	-0.235	-0.281
	(0.310)	(0.205)
LGDP - Lag 4	0.284	0.441
	(0.575)	(0.380)
LGDS - Lag 5	-0.180	0.016
	(0.314)	(0.208)
LGDP - Lag 5	0.481	0.225
	(0.582)	(0.385)
LGDS - Lag 6	0.170	0.082
	(0.307)	(0.203)
LGDP - Lag 6	-0.590	-0.426
	(0.575)	(0.380)
LGDS - Lag 7	-0.004	0.036
	(0.308)	(0.203)

LGDP - Lag 7	0.175 (0.595)	0.053 (0.393)
LGDS - Lag 8	0.335 (0.307)	0.199 (0.203)
LGDP - Lag 8	-0.063 (0.604)	0.192 (0.399)
LGDS - Lag 9	-0.437 (0.311)	
LGDP - Lag 9	0.099 (0.587)	-0.092 (0.388)
LGDS - Lag 10	0.196 (0.217)	0.088
LGDP - Lag 10	-0.155 (0.353)	0.041
Constant	0.779 (0.664)	0.812*
Observations	50	50
R ²	0.978	0.993
Adjusted R ²	0.964	0.988
Residual Std. Error ($df = 29$)	0.147	0.097
F Statistic (df = 20; 29)	65.811***	210.333***

VAR(10) Model - Korea, Rep.

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	1.556***	0.290
	(0.465)	(0.386)
LGDP - Lag 1	-0.663	0.667
	(0.537)	(0.446)
LGDS - Lag 2	-1.038	-0.031
	(0.696)	(0.579)
LGDP - Lag 2	0.831	-0.251
	(0.803)	(0.668)
LGDS - Lag 3	0.715	-0.077
	(0.701)	(0.583)
LGDP - Lag 3	-0.484	0.321

	(0.821)	(0.682)
LGDS - Lag 4	-0.417	0.048
	(0.649)	(0.539)
LGDP - Lag 4	0.209	-0.238
	(0.760)	(0.632)
LGDS - Lag 5	0.172	-0.098
	(0.530)	(0.440)
LGDP - Lag 5	0.017	0.252
	(0.662)	(0.550)
LGDS - Lag 6	-0.157	0.052
	(0.391)	(0.325)
LGDP - Lag 6	-0.186	-0.220
	(0.560)	(0.465)
LGDS - Lag 7	-0.007	-0.180
	(0.305)	(0.254)
LGDP - Lag 7	0.343	0.286
	(0.492)	(0.409)
LGDS - Lag 8	-0.065	0.109
	(0.253)	(0.210)
LGDP - Lag 8	-0.152	-0.129
	(0.439)	(0.365)
LGDS - Lag 9	0.285	0.034
	(0.244)	(0.203)
LGDP - Lag 9	-0.315	-0.250
	(0.404)	(0.336)
LGDS - Lag 10	0.081	0.103
	(0.158)	(0.131)
LGDP - Lag 10	0.135	0.196
	(0.230)	(0.191)
Constant	1.622**	1.509***
	(0.656)	(0.545)
Observations	50	50
R^2	0.995	0.996
Adjusted R ²	0.992	0.993
Residual Std. Error ($df = 29$)	0.144	0.120
F Statistic (df = 20; 29)	314.563***	351.577***
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VAR(10) Model - Kuwait

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.853***	0.304**
	(0.223)	(0.119)
LGDP - Lag 1	0.250	0.613**
	(0.438)	(0.234)
LGDS - Lag 2	0.786^{***}	0.456***
	(0.256)	(0.137)
LGDP - Lag 2	-1.595***	-1.002***
	(0.450)	(0.241)
LGDS - Lag 3	-0.480	-0.207
	(0.296)	(0.158)
LGDP - Lag 3	0.491	0.541^{*}
	(0.565)	(0.302)
LGDS - Lag 4	0.415	0.169
	(0.300)	(0.160)
LGDP - Lag 4	-0.074	-0.353
	(0.559)	(0.299)
LGDS - Lag 5	-0.711**	-0.717***
	(0.302)	, ,
LGDP - Lag 5	0.961^{*}	
	(0.524)	
LGDS - Lag 6	0.749^{*}	
	(0.370)	, ,
LGDP - Lag 6	-1.125 [*]	
	(0.572)	,
LGDS - Lag 7	-0.356	
	(0.346)	· · · · ·
LGDP - Lag 7	0.485	0.380
	(0.537)	
LGDS - Lag 8	-0.007	0.132
	(0.338)	
LGDP - Lag 8	0.106	-0.163
	(0.525)	
LGDS - Lag 9	-0.187	-0.254

	(0.330)	(0.177)
LGDP - Lag 9	0.575	0.587**
	(0.510)	(0.273)
LGDS - Lag 10	-0.270	-0.044
	(0.269)	(0.144)
LGDP - Lag 10	0.020	-0.097
	(0.417)	(0.223)
Constant	0.975	1.449**
	(1.278)	(0.683)
Observations	50	50
\mathbb{R}^2	0.912	0.948
Adjusted R ²	0.852	0.911
Residual Std. Error ($df = 29$)	0.485	0.259
F Statistic (df = 20; 29)	15.056***	26.227***

VAR(10) Model - Luxembourg

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.581*	-0.124
	(0.290)	(0.197)
LGDP - Lag 1	0.736	1.439***
	(0.441)	(0.300)
LGDS - Lag 2	0.250	0.204
	(0.361)	(0.246)
LGDP - Lag 2	-1.249*	-0.984**
	(0.655)	(0.446)
LGDS - Lag 3	0.063	-0.044
	(0.361)	(0.245)
LGDP - Lag 3	0.479	0.488
	(0.709)	(0.483)
LGDS - Lag 4	0.144	0.066
	(0.355)	(0.241)
LGDP - Lag 4	-0.014	-0.074
	(0.731)	(0.498)
LGDS - Lag 5	-0.601*	-0.250
	(0.351)	(0.239)

LGDP - Lag 5	0.178	0.002
S	(0.754)	(0.513)
LGDS - Lag 6	0.611	0.359
G	(0.365)	(0.248)
LGDP - Lag 6	-0.135	-0.123
-	(0.756)	(0.514)
LGDS - Lag 7	-0.291	-0.116
-	(0.384)	(0.261)
LGDP - Lag 7	-0.274	-0.141
	(0.742)	(0.505)
LGDS - Lag 8	0.202	0.053
	(0.382)	(0.260)
LGDP - Lag 8	0.296	0.263
	(0.739)	(0.503)
LGDS - Lag 9	0.079	-0.052
	(0.383)	(0.261)
LGDP - Lag 9	-0.422	-0.146
	(0.713)	(0.485)
LGDS - Lag 10	-0.546*	-0.294
	(0.304)	(0.207)
LGDP - Lag 10	0.914^{*}	0.454
	(0.454)	(0.309)
Constant	-0.279	0.140
	(0.673)	(0.458)
Observations	50	50
\mathbb{R}^2	0.990	0.994
Adjusted R ²	0.984	0.990
Residual Std. Error ($df = 29$)	0.148	0.101
F Statistic (df = 20; 29)	147.340***	239.150***

VAR(10) Model - Madagascar

	Dependen	Dependent Variable	
	LGDS	LGDP	
LGDS - Lag 1	0.021	-0.084**	
	(0.195)	(0.031)	
LGDP - Lag 1	2.190**	0.829***	

	(1.056)	(0.168)
LGDS - Lag 2	0.025	-0.013
	(0.213)	(0.034)
LGDP - Lag 2	-0.800	0.288
	(1.407)	(0.223)
LGDS - Lag 3	-0.049	-0.027
	(0.200)	(0.032)
LGDP - Lag 3	0.814	-0.034
	(1.378)	(0.219)
LGDS - Lag 4	0.124	-0.045
	(0.197)	(0.031)
LGDP - Lag 4	-1.347	-0.001
	(1.352)	(0.215)
LGDS - Lag 5	-0.144	-0.003
	(0.172)	(0.027)
LGDP - Lag 5	-0.339	0.117
	(1.377)	(0.219)
LGDS - Lag 6	-0.085	0.019
	(0.174)	(0.028)
LGDP - Lag 6	0.388	0.039
	(1.359)	(0.216)
LGDS - Lag 7	-0.074	-0.020
	(0.174)	(0.028)
LGDP - Lag 7	0.317	-0.069
	(1.353)	(0.215)
LGDS - Lag 8	-0.130	0.010
	(0.172)	(0.027)
LGDP - Lag 8	1.277	-0.320
	(1.347)	(0.214)
LGDS - Lag 9	0.001	-0.020
	(0.172)	(0.027)
LGDP - Lag 9	0.429	-0.027
	(1.392)	(0.221)
LGDS - Lag 10	-0.070	
	(0.146)	(0.023)
LGDP - Lag 10	0.638	0.551**
	(1.281)	(0.203)
Constant	-15.612**	-1.380

	(6.014)	(0.955)
Observations	50	50
\mathbb{R}^2	0.622	0.900
Adjusted R ²	0.361	0.831
Residual Std. Error ($df = 29$)	0.806	0.128
F Statistic (df = 20; 29)	2.383**	13.076***

VAR(10) Model - Malawi

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.323	0.061*
	(0.191)	(0.036)
LGDP - Lag 1	1.381	0.754***
	(1.031)	(0.192)
LGDS - Lag 2	0.184	0.030
	(0.190)	(0.035)
LGDP - Lag 2	-3.471**	-0.188
	(1.324)	(0.247)
LGDS - Lag 3	-0.110	-0.062*
	(0.183)	(0.034)
LGDP - Lag 3	3.226**	0.430
	(1.397)	(0.260)
LGDS - Lag 4	0.619**	-0.007
	(0.238)	(0.044)
LGDP - Lag 4	-2.250	-0.191
	(1.370)	(0.255)
LGDS - Lag 5	-0.296	-0.067
	(0.235)	(0.044)
LGDP - Lag 5	2.934**	0.042
	(1.309)	(0.244)
LGDS - Lag 6	0.004	0.065^{*}
	(0.200)	(0.037)
LGDP - Lag 6	-1.885	0.112
	(1.339)	(0.250)
LGDS - Lag 7	-0.174	0.002
	(0.212)	(0.039)

LGDP - Lag 7	1.076 (1.401)	-0.179 (0.261)
LGDS - Lag 8	0.055 (0.211)	0.024 (0.039)
LGDP - Lag 8	1.131 (1.421)	0.049 (0.265)
LGDS - Lag 9	-0.286 (0.198)	
LGDP - Lag 9	-3.530** (1.553)	0.043 (0.289)
LGDS - Lag 10	0.259 (0.191)	
LGDP - Lag 10	1.326 (1.178)	0.109 (0.220)
Constant	1.205 (1.561)	0.208 (0.291)
Observations	50	50
\mathbb{R}^2	0.570	0.930
Adjusted R ²	0.274	0.882
Residual Std. Error ($df = 29$)	0.940	0.175
F Statistic (df = 20; 29)	1.924*	19.336***

VAR(10) Model - Malta

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.359	-0.220
	(0.433)	(0.147)
LGDP - Lag 1	-0.027	1.167**
	(1.368)	(0.463)
LGDS - Lag 2	-0.185	-0.015
	(0.630)	(0.213)
LGDP - Lag 2	1.098	-0.057
	(2.108)	(0.714)
LGDS - Lag 3	-0.038	-0.004
	(0.611)	(0.207)
LGDP - Lag 3	-0.331	0.074

	(2.115)	(0.716)
LGDS - Lag 4	-0.223	0.036
	(0.585)	(0.198)
LGDP - Lag 4	-0.385	-0.073
	(2.022)	(0.685)
LGDS - Lag 5	0.328	-0.072
	(0.520)	(0.176)
LGDP - Lag 5	-0.635	-0.215
	(1.879)	(0.636)
LGDS - Lag 6	-0.749*	-0.111
	(0.392)	(0.133)
LGDP - Lag 6	1.732	0.413
	(1.392)	(0.471)
LGDS - Lag 7	-0.385	-0.184
	(0.385)	(0.130)
LGDP - Lag 7	1.348	0.404
	(1.249)	(0.423)
LGDS - Lag 8	-0.084	-0.047
	(0.379)	(0.128)
LGDP - Lag 8	-0.218	0.273
	(1.177)	(0.399)
LGDS - Lag 9	-0.001	-0.041
	(0.380)	(0.129)
LGDP - Lag 9	0.447	0.054
	(1.077)	(0.365)
LGDS - Lag 10	-0.357	-0.029
	(0.309)	(0.105)
LGDP - Lag 10	-0.029	-0.171
	(0.844)	(0.286)
Constant	-9.757***	-2.736***
	(1.550)	(0.525)
Observations	50	50
\mathbb{R}^2	0.962	0.990
Adjusted R ²	0.936	0.983
Residual Std. Error (df = 29)	0.404	0.137
F Statistic (df = 20; 29)	37.117***	140.013***
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VAR(10) Model - Mauritania

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.787*** (0.191)	0.013 (0.022)
LGDP - Lag 1	-0.432	1.191***
LGDS - Lag 2	(1.596) -0.101	(0.184) 0.001
LGDP - Lag 2	(0.237) 1.585	,
LGDS - Lag 3	(2.592) 0.027	(0.298) 0.022
<u> </u>	(0.237)	(0.027)
LGDP - Lag 3	-0.599 (2.574)	-0.052 (0.296)
LGDS - Lag 4	0.255 (0.234)	-0.003 (0.027)
LGDP - Lag 4	-1.572 (2.448)	-0.068 (0.282)
LGDS - Lag 5	-0.097	-0.026
LGDP - Lag 5	(0.238) 1.476 (2.424)	0.290
LGDS - Lag 6	0.129 (0.234)	0.035 (0.027)
LGDP - Lag 6	-0.752 (2.448)	-0.537*
LGDS - Lag 7	-0.257 (0.237)	-0.034
LGDP - Lag 7	1.153 (2.559)	0.412
LGDS - Lag 8	-0.198	-0.029
LGDP - Lag 8	(0.245) 0.335 (2.597)	-0.001
LGDS - Lag 9	0.300	0.039

	(0.237)	(0.027)
LGDP - Lag 9	-1.765	-0.258
	(2.302)	(0.265)
LGDS - Lag 10	-0.164	0.010
	(0.186)	(0.021)
LGDP - Lag 10	1.207	0.166
	(1.246)	(0.143)
Constant	-2.824	0.596**
	(2.140)	(0.246)
Observations	50	50
R^2	0.842	0.974
Adjusted R ²	0.732	0.956
Residual Std. Error ($df = 29$)	0.898	0.103
F Statistic (df = 20; 29)	7.707***	53.972***

VAR(10) Model - Mexico

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.740	-0.027
	(0.488)	(0.408)
LGDP - Lag 1	0.341	1.202**
	(0.583)	(0.487)
LGDS - Lag 2	-0.191	-0.331
	(0.584)	(0.488)
LGDP - Lag 2	-0.212	-0.368
	(0.751)	(0.627)
LGDS - Lag 3	0.200	0.152
	(0.595)	(0.497)
LGDP - Lag 3	-0.120	0.183
	(0.737)	(0.616)
LGDS - Lag 4	-0.383	-0.155
	(0.581)	(0.486)
LGDP - Lag 4	0.751	0.245
	(0.743)	(0.621)
LGDS - Lag 5	-0.215	-0.206
	(0.565)	(0.472)

LGDP - Lag 5	-0.293	-0.037
	(0.757)	(0.632)
LGDS - Lag 6	0.623	0.600
	(0.560)	(0.468)
LGDP - Lag 6	-0.039	-0.291
	(0.751)	(0.628)
LGDS - Lag 7	-0.311	-0.477
	(0.582)	(0.486)
LGDP - Lag 7	-0.059	0.343
-	(0.752)	(0.629)
LGDS - Lag 8	-0.392	-0.340
-	(0.555)	(0.464)
LGDP - Lag 8	0.572	0.419
	(0.690)	(0.577)
LGDS - Lag 9	0.326	0.572
	(0.520)	(0.435)
LGDP - Lag 9	-0.201	-0.363
	(0.579)	(0.484)
LGDS - Lag 10	0.236	0.004
	(0.423)	(0.353)
LGDP - Lag 10	-0.437	-0.190
	(0.447)	(0.374)
Constant	0.055	0.341
	(0.589)	(0.492)
Observations	50	50
R^2	0.972	0.980
Adjusted R ²	0.952	0.966
Residual Std. Error (df = 29)	0.181	0.151
F Statistic (df = 20; 29)	49.601***	71.343***

VAR(10) Model - Netherlands

	Dependen	Dependent Variable	
	LGDS	LGDP	
LGDS - Lag 1	0.253	-0.531	
	(0.471)	(0.422)	
LGDP - Lag 1	0.905	1.818***	

	(0.524)	(0. 470)
	(0.534)	·
LGDS - Lag 2	0.813	
	(0.591)	, , ,
LGDP - Lag 2	-1.288	
	(0.794)	(0.711)
LGDS - Lag 3	-0.333	
	(0.614)	(0.550)
LGDP - Lag 3	0.655	0.713
	(0.860)	(0.771)
LGDS - Lag 4	0.113	0.049
	(0.574)	(0.515)
LGDP - Lag 4	-0.226	-0.185
	(0.777)	(0.696)
LGDS - Lag 5	-0.017	0.006
	(0.532)	(0.476)
LGDP - Lag 5	-0.103	-0.073
	(0.664)	(0.595)
LGDS - Lag 6	1.063*	1.275**
	(0.523)	(0.468)
LGDP - Lag 6	-1.070	-1.290**
	(0.637)	(0.571)
LGDS - Lag 7	-1.022*	-1.488***
	(0.600)	(0.537)
LGDP - Lag 7	0.940	1.428^{**}
	(0.700)	(0.627)
LGDS - Lag 8	0.316	0.574
	(0.735)	(0.659)
LGDP - Lag 8	-0.126	-0.386
	(0.808)	(0.724)
LGDS - Lag 9	-0.255	-0.230
	(0.749)	(0.671)
LGDP - Lag 9	0.266	0.158
	(0.802)	(0.718)
LGDS - Lag 10	0.123	-0.040
	(0.518)	(0.464)
LGDP - Lag 10	-0.071	0.087
	(0.534)	(0.479)
Constant	0.840	0.887^{*}

	(0.569)	(0.509)
Observations	50	50
\mathbb{R}^2	0.992	0.993
Adjusted R ²	0.987	0.989
Residual Std. Error ($df = 29$)	0.096	0.086
F Statistic (df = 20; 29)	185.066***	215.588***

VAR(10) Model - New Zealand

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.527	0.068
	(0.425)	(0.337)
LGDP - Lag 1	0.437	1.114**
	(0.551)	(0.437)
LGDS - Lag 2	-0.036	0.010
	(0.460)	(0.365)
LGDP - Lag 2	-0.342	-0.459
	(0.696)	(0.552)
LGDS - Lag 3	0.136	0.126
	(0.428)	(0.339)
LGDP - Lag 3	0.065	0.043
	(0.660)	(0.523)
LGDS - Lag 4	0.104	0.156
	(0.415)	(0.329)
LGDP - Lag 4	-0.404	-0.283
	(0.642)	(0.509)
LGDS - Lag 5	-0.127	-0.275
	(0.427)	(0.339)
LGDP - Lag 5	0.394	0.340
	(0.668)	(0.529)
LGDS - Lag 6	0.110	0.200
	(0.438)	(0.347)
LGDP - Lag 6	-0.121	-0.163
	(0.675)	(0.535)
LGDS - Lag 7	0.242	0.060
	(0.442)	(0.351)

LGDP - Lag 7	0.099	0.176
	(0.674)	(0.534)
LGDS - Lag 8	-0.322	-0.275
	(0.435)	(0.345)
LGDP - Lag 8	0.186	0.214
	(0.664)	(0.526)
LGDS - Lag 9	-0.214	0.186
	(0.432)	(0.343)
LGDP - Lag 9	0.411	-0.142
	(0.645)	(0.511)
LGDS - Lag 10	0.243	-0.089
	(0.289)	(0.229)
LGDP - Lag 10	-0.442	-0.040
	(0.405)	(0.321)
Constant	0.144	0.626
	(0.693)	(0.549)
Observations	50	50
\mathbb{R}^2	0.985	0.990
Adjusted R ²	0.975	0.983
Residual Std. Error ($df = 29$)	0.134	0.106
F Statistic (df = 20; 29)	95.219***	146.667***

VAR(10) Model - Norway

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.517	-0.483**
	(0.349)	(0.212)
LGDP - Lag 1	0.816	1.695***
	(0.538)	(0.327)
LGDS - Lag 2	-0.213	0.287
	(0.545)	(0.332)
LGDP - Lag 2	-0.035	-0.405
	(0.852)	(0.518)
LGDS - Lag 3	0.666	0.393
	(0.587)	(0.357)
LGDP - Lag 3	-0.677	-0.488

	(0.877)	(0.533)
LGDS - Lag 4	-0.517	-0.485
	(0.574)	(0.349)
LGDP - Lag 4	0.476	0.494
	(0.838)	(0.510)
LGDS - Lag 5	0.400	0.527
	(0.542)	(0.330)
LGDP - Lag 5	-0.235	-0.644
	(0.838)	(0.510)
LGDS - Lag 6	0.462	0.075
	(0.546)	(0.332)
LGDP - Lag 6	-0.703	0.149
	(0.854)	(0.520)
LGDS - Lag 7	-0.528	-0.106
	(0.543)	(0.330)
LGDP - Lag 7	0.541	-0.137
	(0.856)	(0.521)
LGDS - Lag 8	0.079	-0.015
	(0.559)	(0.340)
LGDP - Lag 8	-0.374	-0.128
	(0.895)	(0.545)
LGDS - Lag 9	-1.103*	-0.943***
	(0.559)	(0.340)
LGDP - Lag 9	1.561*	1.209**
	(0.891)	(0.542)
LGDS - Lag 10	0.614	0.566^{*}
	(0.457)	(0.278)
LGDP - Lag 10	-0.746	-0.588
	(0.622)	(0.378)
Constant	-0.668	0.121
	(0.734)	(0.447)
Observations	50	50
\mathbb{R}^2	0.991	0.996
Adjusted R ²	0.985	0.994
Residual Std. Error ($df = 29$)	0.122	0.074
F Statistic (df = 20; 29)	163.358***	398.028***
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VAR(10) Model - Oman

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.633*	-0.129
	(0.351)	(0.180)
LGDP - Lag 1	-0.124	0.929***
	(0.650)	(0.334)
LGDS - Lag 2	-0.734	-0.237
	(0.468)	(0.241)
LGDP - Lag 2	1.380	0.388
	(0.903)	(0.464)
LGDS - Lag 3	0.607	0.194
	(0.462)	(0.238)
LGDP - Lag 3	-0.759	-0.185
	(0.910)	(0.468)
LGDS - Lag 4	-0.252	-0.008
	(0.441)	(0.226)
LGDP - Lag 4	0.571	0.051
	(0.890)	(0.457)
LGDS - Lag 5	0.486	0.153
	(0.392)	(0.201)
LGDP - Lag 5	-0.580	-0.072
	(0.744)	(0.383)
LGDS - Lag 6	-0.142	-0.035
	(0.327)	(0.168)
LGDP - Lag 6	0.325	0.177
	(0.539)	(0.277)
LGDS - Lag 7	0.025	0.042
	(0.323)	(0.166)
LGDP - Lag 7	0.193	-0.092
	(0.528)	(0.271)
LGDS - Lag 8	-0.326	-0.183
	(0.309)	(0.159)
LGDP - Lag 8	0.064	0.172
	(0.514)	(0.264)
LGDS - Lag 9	0.148	0.205

	(0.313)	(0.161)
LGDP - Lag 9	-0.580	-0.594**
	(0.525)	(0.270)
LGDS - Lag 10	-0.511**	-0.348***
	(0.244)	(0.126)
LGDP - Lag 10	0.594	0.534***
	(0.358)	(0.184)
Constant	-1.298	-0.002
	(0.831)	(0.427)
Observations	50	50
R^2	0.944	0.985
Adjusted R ²	0.905	0.975
Residual Std. Error ($df = 29$)	0.307	0.158
F Statistic (df = 20; 29)	24.392***	97.855***

VAR(10) Model - Pakistan

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.799***	-0.053
	(0.214)	(0.123)
LGDP - Lag 1	0.006	1.038***
	(0.345)	(0.197)
LGDS - Lag 2	0.041	0.040
	(0.254)	(0.145)
LGDP - Lag 2	0.080	-0.408
	(0.494)	(0.283)
LGDS - Lag 3	-0.088	-0.183
	(0.247)	(0.141)
LGDP - Lag 3	-0.079	0.350
	(0.499)	(0.286)
LGDS - Lag 4	0.118	0.164
	(0.246)	(0.141)
LGDP - Lag 4	-0.242	-0.052
	(0.512)	(0.293)
LGDS - Lag 5	0.181	-0.090
	(0.257)	(0.147)

LGDP - Lag 5	0.013	0.054
	(0.515)	(0.294)
LGDS - Lag 6	0.050	0.061
	(0.252)	(0.144)
LGDP - Lag 6	0.112	-0.221
	(0.504)	(0.288)
LGDS - Lag 7	-0.315	-0.026
	(0.252)	(0.144)
LGDP - Lag 7	0.346	0.156
	(0.503)	(0.288)
LGDS - Lag 8	-0.024	0.115
	(0.259)	(0.148)
LGDP - Lag 8	-0.885*	-0.237
-	(0.488)	(0.279)
LGDS - Lag 9	0.049	-0.187
G	(0.248)	(0.142)
LGDP - Lag 9	0.939^{*}	0.203
G	(0.498)	(0.285)
LGDS - Lag 10	0.045	0.173
G	(0.198)	(0.113)
LGDP - Lag 10	-0.188	0.081
	(0.387)	(0.221)
Constant	0.032	0.292
	(0.498)	
Observations	50	50
R ²	0.953	0.984
Adjusted R ²	0.933	0.973
Residual Std. Error (df = 29)	0.201	0.115
F Statistic (df = 20; 29)	29.195***	88.171***

VAR(10) Model - Papua New Guinea

	Dependen	Dependent Variable	
	LGDS	LGDP	
LGDS - Lag 1	0.909***	0.064	
	(0.225)	(0.094)	
LGDP - Lag 1	0.327	1.206***	

	(0.568)	(0.239)
LGDS - Lag 2	-0.238	-0.047
G	(0.176)	(0.074)
LGDP - Lag 2	-0.305	-0.268
-	(0.784)	(0.329)
LGDS - Lag 3	0.147	0.009
	(0.128)	(0.054)
LGDP - Lag 3	0.301	0.144
	(0.757)	(0.318)
LGDS - Lag 4	-0.123	-0.023
	(0.126)	(0.053)
LGDP - Lag 4	0.296	-0.088
	(0.749)	(0.314)
LGDS - Lag 5	-0.128	-0.049
	(0.126)	(0.053)
LGDP - Lag 5	-0.273	0.070
	(0.757)	(0.318)
LGDS - Lag 6	0.068	0.037
	(0.128)	(0.054)
LGDP - Lag 6	0.258	0.013
	(0.745)	(0.313)
LGDS - Lag 7	0.109	0.044
	(0.124)	(0.052)
LGDP - Lag 7	-0.503	-0.350
	(0.739)	(0.311)
LGDS - Lag 8	-0.092	-0.019
	(0.121)	(0.051)
LGDP - Lag 8	-0.200	0.151
	(0.760)	(0.319)
LGDS - Lag 9	0.022	0.017
	(0.120)	(0.051)
LGDP - Lag 9	0.234	-0.002
	(0.754)	(0.317)
LGDS - Lag 10	-0.047	
	(0.108)	,
LGDP - Lag 10	0.358	0.064
	(0.486)	,
Constant	-1.282	0.322

	(1.484)	(0.623)
Observations	50	50
R^2	0.926	0.972
Adjusted R ²	0.876	0.952
Residual Std. Error ($df = 29$)	0.349	0.147
F Statistic (df = 20; 29)	18.270***	49.972***

VAR(10) Model - Peru

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	1.245***	0.197
	(0.242)	(0.156)
LGDP - Lag 1	-0.492	0.682^{**}
	(0.392)	(0.253)
LGDS - Lag 2	-0.070	0.170
	(0.331)	(0.213)
LGDP - Lag 2	0.769	0.350
	(0.519)	(0.335)
LGDS - Lag 3	-0.510	-0.410*
	(0.321)	(0.207)
LGDP - Lag 3	0.246	0.095
	(0.521)	(0.336)
LGDS - Lag 4	-0.462	-0.262
	(0.330)	(0.213)
LGDP - Lag 4	-0.052	-0.038
	(0.507)	(0.327)
LGDS - Lag 5	0.617^{*}	0.197
	(0.336)	(0.217)
LGDP - Lag 5	-0.421	-0.027
	(0.489)	(0.315)
LGDS - Lag 6	0.346	0.431^{*}
	(0.340)	(0.219)
LGDP - Lag 6	-0.357	-0.529
	(0.491)	(0.316)
LGDS - Lag 7	-0.316	-0.225
	(0.355)	(0.229)

LGDP - Lag 7	0.567	0.311
	(0.516)	,
LGDS - Lag 8	-0.445	-0.013
	(0.338)	(0.218)
LGDP - Lag 8	0.563	0.165
	(0.473)	(0.305)
LGDS - Lag 9	0.556	0.039
	(0.354)	(0.228)
LGDP - Lag 9	-1.159**	-0.346
	(0.478)	(0.308)
LGDS - Lag 10	-0.221	0.016
	(0.261)	(0.168)
LGDP - Lag 10	0.597^{*}	0.194
	(0.333)	(0.215)
Constant	-0.349	0.298
	(0.388)	(0.250)
Observations	50	50
R^2	0.974	0.987
Adjusted R ²	0.956	0.978
Residual Std. Error ($df = 29$)	0.183	0.118
F Statistic (df = 20; 29)	53.631***	108.234***

VAR(10) Model - Portugal

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	1.438***	0.362**
	(0.239)	(0.135)
LGDP - Lag 1	-0.681	0.651***
	(0.410)	(0.231)
LGDS - Lag 2	-0.891**	-0.229
	(0.341)	(0.193)
LGDP - Lag 2	0.902	0.082
	(0.596)	(0.336)
LGDS - Lag 3	0.144	0.001
	(0.371)	(0.210)
LGDP - Lag 3	-0.058	0.073

	(0.619)	(0.349)
LGDS - Lag 4	0.305	0.140
	(0.382)	(0.216)
LGDP - Lag 4	-0.133	0.136
	(0.633)	(0.357)
LGDS - Lag 5	-0.674	-0.407*
	(0.403)	(0.227)
LGDP - Lag 5	0.447	0.030
	(0.676)	(0.381)
LGDS - Lag 6	0.365	0.297
	(0.409)	(0.231)
LGDP - Lag 6	-0.360	-0.204
	(0.679)	(0.383)
LGDS - Lag 7	0.342	0.185
	(0.407)	(0.229)
LGDP - Lag 7	-0.615	-0.398
	(0.654)	(0.369)
LGDS - Lag 8	-0.453	-0.157
	(0.399)	(0.225)
LGDP - Lag 8	0.781	0.290
	(0.679)	(0.383)
LGDS - Lag 9	0.935**	0.527^{**}
	(0.369)	(0.208)
LGDP - Lag 9	-1.129	-0.582
	(0.672)	(0.379)
LGDS - Lag 10	-0.710***	-0.446***
	(0.233)	(0.131)
LGDP - Lag 10	0.972^{**}	0.626***
	(0.373)	(0.211)
Constant	0.479	0.779^{***}
	(0.377)	(0.213)
Observations	50	50
\mathbb{R}^2	0.986	0.996
Adjusted R ²	0.976	0.993
Residual Std. Error (df = 29)	0.145	0.082
F Statistic (df = 20; 29)	100.977	362.875***
$N_{0}(a) * n < 0.1 * n < 0.05 * n < 0.01$		

VAR(10) Model - Rwanda

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.468**	0.053
	(0.177)	(0.050)
LGDP - Lag 1	-0.104	0.275
	(0.637)	(0.182)
LGDS - Lag 2	0.517***	0.137^{**}
	(0.182)	(0.052)
LGDP - Lag 2	-0.444	0.191
	(0.619)	(0.177)
LGDS - Lag 3	-0.117	0.058
	(0.196)	(0.056)
LGDP - Lag 3	1.504**	0.075
	(0.632)	(0.180)
LGDS - Lag 4	-0.117	-0.076
	(0.189)	(0.054)
LGDP - Lag 4	-0.711	-0.097
	(0.669)	(0.191)
LGDS - Lag 5	-0.109	0.022
	(0.156)	(0.045)
LGDP - Lag 5	0.205	-0.019
	(0.663)	(0.189)
LGDS - Lag 6	0.422^{***}	0.032
	(0.148)	(0.042)
LGDP - Lag 6	-1.346 ^{**}	-0.044
	(0.658)	(0.188)
LGDS - Lag 7	-0.091	-0.032
	(0.148)	(0.042)
LGDP - Lag 7	0.369	0.232
	(0.660)	(0.188)
LGDS - Lag 8	-0.242	-0.099**
	(0.146)	(0.042)
LGDP - Lag 8	2.240***	0.265
	(0.666)	(0.190)
LGDS - Lag 9	-0.058	-0.115**

	(0.147)	(0.042)
LGDP - Lag 9	-0.992	0.160
	(0.721)	(0.206)
LGDS - Lag 10	-0.281*	-0.047
	(0.156)	(0.044)
LGDP - Lag 10	-0.182	-0.116
	(0.615)	(0.175)
Constant	-1.621	0.663
	(1.552)	(0.443)
Observations	50	50
\mathbb{R}^2	0.882	0.967
Adjusted R ²	0.801	0.945
Residual Std. Error ($df = 29$)	0.582	0.166
F Statistic (df = 20; 29)	10.857***	42.739***

VAR(10) Model - Saudi Arabia

Dependent Variable	
LGDS	LGDP
1.404***	0.381*
(0.408)	(0.194)
-0.803	0.356
(0.828)	(0.394)
-0.249	-0.264
(0.497)	(0.237)
0.469	0.458
(0.969)	(0.461)
-0.465	-0.148
(0.519)	(0.247)
0.954	0.267
(0.991)	(0.472)
0.251	0.155
(0.497)	(0.236)
-0.792	-0.405
(0.912)	(0.434)
-0.330	-0.217
(0.505)	(0.240)
	LGDS 1.404*** (0.408) -0.803 (0.828) -0.249 (0.497) 0.469 (0.969) -0.465 (0.519) 0.954 (0.991) 0.251 (0.497) -0.792 (0.912) -0.330

LGDP - Lag 5	0.507	0.401
	(0.903)	(0.430)
LGDS - Lag 6	0.064	0.070
	(0.477)	(0.227)
LGDP - Lag 6	0.439	0.240
	(0.839)	(0.399)
LGDS - Lag 7	0.411	0.238
	(0.477)	(0.227)
LGDP - Lag 7	-1.308	-0.862**
	(0.835)	(0.398)
LGDS - Lag 8	0.484	0.178
	(0.474)	(0.226)
LGDP - Lag 8	-0.820	-0.300
	(0.855)	(0.407)
LGDS - Lag 9	0.204	0.155
-	(0.453)	(0.216)
LGDP - Lag 9	-0.586	-0.310
	(0.766)	(0.364)
LGDS - Lag 10	-0.638*	-0.309*
	(0.320)	(0.152)
LGDP - Lag 10	1.626***	0.783***
	(0.563)	(0.268)
Constant	1.905	1.556**
	(1.279)	(0.609)
Observations	50	50
\mathbb{R}^2	0.935	0.979
Adjusted R ²	0.891	0.964
Residual Std. Error ($df = 29$)	0.294	0.140
F Statistic (df = 20; 29)	21.011***	67.135***

VAR(10) Model - Singapore

	Dependen	Dependent Variable	
	LGDS	LGDP	
LGDS - Lag 1	1.455**	0.311	
	(0.567)	(0.406)	
LGDP - Lag 1	-0.305	0.881	

	(0.774)	(0.554)
LGDS - Lag 2	-0.153	0.133
	(0.693)	(0.497)
LGDP - Lag 2	-0.420	-0.720
	(1.027)	(0.736)
LGDS - Lag 3	-1.379**	-1.178**
	(0.615)	(0.440)
LGDP - Lag 3	2.220^{**}	1.825**
	(0.947)	(0.678)
LGDS - Lag 4	0.452	0.603
	(0.558)	(0.400)
LGDP - Lag 4	-0.956	-1.018
	(0.865)	(0.620)
LGDS - Lag 5	0.154	-0.024
	(0.604)	(0.433)
LGDP - Lag 5	-0.311	-0.056
	(0.906)	(0.649)
LGDS - Lag 6	0.156	0.181
	(0.577)	(0.413)
LGDP - Lag 6	0.030	0.056
	(0.863)	(0.618)
LGDS - Lag 7	0.558	0.158
	(0.509)	(0.365)
LGDP - Lag 7	-0.597	
	(0.822)	(0.589)
LGDS - Lag 8	-0.845*	
	(0.421)	(0.302)
LGDP - Lag 8	0.903	0.596
	(0.733)	
LGDS - Lag 9	0.389**	0.201^{*}
	(0.164)	,
LGDP - Lag 9	-0.797*	
	(0.458)	, , ,
LGDS - Lag 10	-0.031	0.012
	(0.096)	
LGDP - Lag 10	0.443*	0.381**
	(0.227)	
Constant	0.283	0.586

	(0.720)	(0.516)
Observations	50	50
R^2	0.997	0.998
Adjusted R ²	0.995	0.996
Residual Std. Error ($df = 29$)	0.103	0.074
F Statistic (df = 20; 29)	479.350***	663.142***

VAR(10) Model - South Africa

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	1.530***	0.534
	(0.440)	(0.372)
LGDP - Lag 1	-0.067	0.932^{**}
	(0.519)	(0.440)
LGDS - Lag 2	-1.070*	-0.637
	(0.611)	(0.518)
LGDP - Lag 2	-0.044	-0.383
	(0.723)	(0.613)
LGDS - Lag 3	0.697	0.533
	(0.640)	(0.543)
LGDP - Lag 3	0.247	0.199
	(0.727)	(0.616)
LGDS - Lag 4	0.178	-0.087
	(0.641)	(0.543)
LGDP - Lag 4	-0.975	-0.343
	(0.717)	(0.607)
LGDS - Lag 5	-0.975	-0.779
	(0.587)	(0.497)
LGDP - Lag 5	1.389^{*}	0.783
	(0.706)	(0.599)
LGDS - Lag 6	1.556***	1.194**
	(0.547)	(0.463)
LGDP - Lag 6	-1.603**	-0.965
	(0.709)	(0.601)
LGDS - Lag 7	-1.151*	-1.017**
	(0.582)	(0.494)

LGDP - Lag 7	1.197	0.951
	(0.776)	(0.657)
LGDS - Lag 8	0.392	0.468
	(0.619)	(0.525)
LGDP - Lag 8	-0.344	-0.438
	(0.798)	(0.676)
LGDS - Lag 9	-0.255	-0.179
	(0.603)	(0.511)
LGDP - Lag 9	-0.032	-0.003
	(0.737)	(0.625)
LGDS - Lag 10	-0.066	0.018
	(0.411)	(0.348)
LGDP - Lag 10	0.295	0.173
	(0.465)	(0.394)
Constant	0.622^{**}	0.520^{**}
	(0.288)	(0.244)
Observations	50	50
\mathbb{R}^2	0.946	0.977
Adjusted R ²	0.909	0.960
Residual Std. Error ($df = 29$)	0.138	0.117
F Statistic (df = 20; 29)	25.604***	60.273***

VAR(10) Model - Spain

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	2.274***	1.249**
	(0.641)	(0.562)
LGDP - Lag 1	-1.272*	-0.056
	(0.727)	(0.638)
LGDS - Lag 2	-0.692	-0.617
	(0.919)	(0.806)
LGDP - Lag 2	0.750	0.479
	(1.067)	(0.936)
LGDS - Lag 3	-2.096**	-1.776**
	(0.921)	(0.808)
LGDP - Lag 3	1.875^{*}	1.655*

	(1.091)	(0.957)
LGDS - Lag 4	2.132**	1.984**
	(0.969)	(0.850)
LGDP - Lag 4	-2.209*	-2.078**
	(1.132)	(0.993)
LGDS - Lag 5	-0.207	-0.356
	(1.030)	(0.904)
LGDP - Lag 5	0.338	0.502
	(1.211)	(1.063)
LGDS - Lag 6	-0.644	-0.640
	(0.996)	(0.873)
LGDP - Lag 6	0.402	0.396
	(1.201)	(1.054)
LGDS - Lag 7	0.480	0.568
	(0.943)	(0.827)
LGDP - Lag 7	-0.349	-0.419
	(1.135)	(0.996)
LGDS - Lag 8	0.550	0.550
	(0.948)	(0.831)
LGDP - Lag 8	-0.328	-0.385
	(1.132)	(0.993)
LGDS - Lag 9	-0.777	-1.051
	(0.935)	(0.820)
LGDP - Lag 9	0.554	0.822
	(1.091)	(0.957)
LGDS - Lag 10	-0.114	0.198
	(0.604)	(0.530)
LGDP - Lag 10	0.257	-0.079
	(0.683)	(0.599)
Constant	0.688^{*}	0.742^{**}
	(0.356)	(0.312)
Observations	50	50
\mathbb{R}^2	0.992	0.994
Adjusted R ²	0.986	0.990
Residual Std. Error (df = 29)	0.109	0.095
F Statistic (df = 20; 29)	176.378***	240.085***
17 . 4 . 0 1 44 . 0 05 444 . 0 .	0.1	

VAR(10) Model - Sweden

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.574	-0.197
	(0.626)	(0.513)
LGDP - Lag 1	0.493	1.377**
	(0.765)	(0.627)
LGDS - Lag 2	0.232	0.536
	(0.795)	(0.652)
LGDP - Lag 2	-0.702	-0.993
	(1.064)	(0.872)
LGDS - Lag 3	0.106	-0.022
	(0.846)	(0.693)
LGDP - Lag 3	0.040	0.120
	(1.135)	(0.930)
LGDS - Lag 4	-0.428	-0.395
	(0.882)	(0.723)
LGDP - Lag 4	0.620	0.644
	(1.206)	(0.988)
LGDS - Lag 5	0.226	0.156
	(0.961)	(0.788)
LGDP - Lag 5	-0.565	-0.500
	(1.334)	(1.093)
LGDS - Lag 6	1.186	0.978
	(0.955)	(0.783)
LGDP - Lag 6	-1.362	-1.027
	(1.321)	(1.083)
LGDS - Lag 7	-0.615	-0.528
	(0.898)	(0.736)
LGDP - Lag 7	0.851	0.693
	(1.211)	(0.992)
LGDS - Lag 8	-0.563	-0.459
	(0.871)	(0.714)
LGDP - Lag 8	1.221	0.945
	(1.214)	(0.995)
LGDS - Lag 9	0.417	0.169

	(0.833)	(0.682)
LGDP - Lag 9	-1.043	-0.696
	(1.211)	(0.992)
LGDS - Lag 10	-0.187	-0.117
	(0.474)	(0.389)
LGDP - Lag 10	0.420	0.250
	(0.674)	(0.552)
Constant	0.870	0.903^{**}
	(0.522)	(0.428)
Observations	50	50
\mathbb{R}^2	0.984	0.988
Adjusted R ²	0.972	0.980
Residual Std. Error ($df = 29$)	0.122	0.100
F Statistic (df = 20; 29)	87.410***	122.113***

VAR(10) Model - Switzerland

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	1.311***	0.268
	(0.385)	(0.327)
LGDP - Lag 1	-0.346	0.799^{**}
	(0.455)	(0.386)
LGDS - Lag 2	-0.584	-0.252
	(0.559)	(0.474)
LGDP - Lag 2	0.428	0.002
	(0.657)	(0.558)
LGDS - Lag 3	0.589	0.501
	(0.569)	(0.483)
LGDP - Lag 3	-0.615	-0.478
	(0.671)	(0.569)
LGDS - Lag 4	-0.391	-0.446
	(0.569)	(0.483)
LGDP - Lag 4	0.612	0.676
	(0.678)	(0.576)
LGDS - Lag 5	-0.134	0.090
	(0.546)	(0.463)

LGDP - Lag 5	-0.145	-0.331
	(0.670)	(0.568)
LGDS - Lag 6	0.654	0.246
	(0.531)	(0.451)
LGDP - Lag 6	-0.685	-0.276
	(0.646)	(0.549)
LGDS - Lag 7	-0.867	-0.618
	(0.550)	(0.467)
LGDP - Lag 7	1.012	0.719
	(0.660)	(0.560)
LGDS - Lag 8	1.295**	1.121**
	(0.569)	(0.483)
LGDP - Lag 8	-0.976	-0.803
	(0.683)	(0.580)
LGDS - Lag 9	-1.216**	-1.148**
	(0.592)	(0.502)
LGDP - Lag 9	0.994	0.946
	(0.670)	(0.569)
LGDS - Lag 10	-0.113	-0.085
	(0.438)	(0.372)
LGDP - Lag 10	0.111	0.019
	(0.445)	(0.377)
Constant	0.249	0.177
	(0.690)	(0.585)
Observations	50	50
R^2	0.992	0.994
Adjusted R ²	0.986	0.990
Residual Std. Error (df = 29)	0.099	0.084
F Statistic (df = 20; 29)	177.105***	241.111***

VAR(10) Model - Thailand

	Dependen	Dependent Variable	
	LGDS	LGDP	
LGDS - Lag 1	0.945***	0.229	
	(0.298)	(0.192)	
LGDP - Lag 1	0.267	1.032***	

	(0.462)	(0.298)
LGDS - Lag 2	-0.012	-0.124
-	(0.364)	(0.235)
LGDP - Lag 2	-0.549	-0.397
	(0.626)	(0.404)
LGDS - Lag 3	-0.551	-0.398
	(0.367)	(0.237)
LGDP - Lag 3	1.182^{*}	0.839^{**}
	(0.634)	(0.409)
LGDS - Lag 4	0.159	0.191
	(0.353)	(0.227)
LGDP - Lag 4	-0.649	-0.515
	(0.661)	(0.426)
LGDS - Lag 5	0.225	0.075
	(0.349)	(0.225)
LGDP - Lag 5	-0.099	-0.095
	(0.668)	(0.431)
LGDS - Lag 6	-0.199	-0.066
	(0.346)	(0.223)
LGDP - Lag 6	0.038	0.124
	(0.662)	(0.427)
LGDS - Lag 7	0.131	0.037
	(0.347)	(0.224)
LGDP - Lag 7	-0.044	-0.088
	(0.661)	(0.426)
LGDS - Lag 8	-0.051	-0.036
	(0.347)	(0.224)
LGDP - Lag 8	0.183	0.167
	(0.654)	(0.422)
LGDS - Lag 9	-0.135	-0.107
	(0.343)	(0.221)
LGDP - Lag 9	-0.271	-0.212
	(0.620)	(0.400)
LGDS - Lag 10	-0.245	-0.026
	(0.287)	(0.185)
LGDP - Lag 10	0.748^{*}	0.377
	(0.438)	(0.283)
Constant	-1.263**	-0.197

	(0.548)	(0.353)
Observations	50	50
R^2	0.993	0.996
Adjusted R ²	0.988	0.993
Residual Std. Error ($df = 29$)	0.136	0.087
F Statistic (df = 20; 29)	202.329***	359.294***

VAR(10) Model - Togo

	Depender	Dependent Variable	
	LGDS	LGDP	
LGDS - Lag 1	0.850***	0.075*	
	(0.218)	(0.040)	
LGDP - Lag 1	-1.098	0.976***	
	(1.153)	(0.213)	
LGDS - Lag 2	-0.173	-0.059	
	(0.252)	(0.047)	
LGDP - Lag 2	1.712	-0.051	
	(1.742)	(0.321)	
LGDS - Lag 3	-0.247	0.013	
	(0.253)	(0.047)	
LGDP - Lag 3	-0.433	-0.043	
	(1.731)	(0.319)	
LGDS - Lag 4	0.652^{**}	0.035	
	(0.251)	(0.046)	
LGDP - Lag 4	0.824	-0.283	
	(1.717)	(0.317)	
LGDS - Lag 5	-0.541*	-0.046	
	(0.280)	(0.052)	
LGDP - Lag 5	-1.653	0.213	
	(1.764)	(0.326)	
LGDS - Lag 6	0.121	0.010	
	(0.287)	(0.053)	
LGDP - Lag 6	2.104	0.212	
	(1.752)	(0.323)	
LGDS - Lag 7	0.115	0.019	
	(0.236)	(0.044)	

LGDP - Lag 7	-3.417* (1.742)	
LGDS - Lag 8	-0.122	0.035
LGDP - Lag 8	(0.215) 3.187*	0.254
LGDS - Lag 9	(1.854) 0.213	, ,
LGDP - Lag 9	(0.219) -1.858	
LGDS - Lag 10	(1.847)	, , ,
•	(0.188)	(0.035)
LGDP - Lag 10	(1.159)	(0.214)
Constant	1.107 (1.583)	
Observations	50	50
\mathbb{R}^2	0.601	0.941
Adjusted R ²	0.326	0.900
Residual Std. Error ($df = 29$)	0.704	0.130
F Statistic (df = 20; 29)	2.185**	22.943***

VAR(10) Model - Turkey

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.380	-0.109
	(0.379)	(0.303)
LGDP - Lag 1	0.656	1.198***
	(0.475)	(0.380)
LGDS - Lag 2	0.456	0.065
	(0.421)	(0.337)
LGDP - Lag 2	-0.614	-0.127
	(0.605)	(0.484)
LGDS - Lag 3	-0.263	-0.500
	(0.431)	(0.345)
LGDP - Lag 3	0.487	0.423

	(0.602)	(0.482)
LGDS - Lag 4	0.591	0.604^{*}
	(0.439)	(0.351)
LGDP - Lag 4	-1.062*	-0.904*
	(0.591)	(0.473)
LGDS - Lag 5	-0.598	-0.132
	(0.456)	(0.365)
LGDP - Lag 5	0.814	0.415
	(0.621)	(0.497)
LGDS - Lag 6	-0.058	-0.083
	(0.431)	(0.345)
LGDP - Lag 6	0.163	0.141
	(0.593)	(0.475)
LGDS - Lag 7	0.294	0.172
	(0.427)	(0.341)
LGDP - Lag 7	-0.187	-0.346
	(0.594)	(0.476)
LGDS - Lag 8	-0.434	-0.486
	(0.417)	(0.334)
LGDP - Lag 8	0.395	0.577
	(0.584)	(0.468)
LGDS - Lag 9	0.506	0.397
	(0.427)	(0.342)
LGDP - Lag 9	-0.531	-0.365
	(0.584)	(0.468)
LGDS - Lag 10	-0.161	-0.096
	(0.362)	(0.290)
LGDP - Lag 10	0.125	0.110
	(0.428)	(0.342)
Constant	-0.009	0.229
	(0.285)	(0.228)
Observations	50	50
R^2	0.963	0.980
Adjusted R ²	0.938	0.967
Residual Std. Error ($df = 29$)	0.217	0.174
F Statistic (df = 20; 29)	38.014***	72.105***
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VAR(10) Model - United Kingdom

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.722***	0.096
	(0.214)	(0.120)
LGDP - Lag 1	0.470	1.060***
	(0.419)	(0.234)
LGDS - Lag 2	-0.167	-0.035
	(0.259)	(0.144)
LGDP - Lag 2	-0.356	-0.227
	(0.565)	(0.315)
LGDS - Lag 3	-0.278	-0.074
	(0.258)	(0.144)
LGDP - Lag 3	0.519	0.058
	(0.555)	(0.309)
LGDS - Lag 4	0.209	-0.046
	(0.257)	(0.144)
LGDP - Lag 4	-0.540	0.042
	(0.562)	(0.313)
LGDS - Lag 5	-0.121	-0.156
	(0.258)	(0.144)
LGDP - Lag 5	0.289	0.037
	(0.553)	(0.308)
LGDS - Lag 6	0.025	0.221
	(0.263)	(0.146)
LGDP - Lag 6	-0.362	-0.260
	(0.554)	(0.309)
LGDS - Lag 7	0.011	0.014
	(0.267)	(0.149)
LGDP - Lag 7	0.883	0.356
	(0.558)	(0.311)
LGDS - Lag 8	-0.018	-0.121
	(0.260)	(0.145)
LGDP - Lag 8	-0.153	0.210
	(0.575)	(0.321)
LGDS - Lag 9	-0.248	0.077

	(0.261)	(0.146)
LGDP - Lag 9	0.059	-0.485
	(0.557)	(0.311)
LGDS - Lag 10	0.209	-0.038
	(0.189)	(0.106)
LGDP - Lag 10	-0.175	0.219
	(0.370)	(0.207)
Constant	-0.924**	0.456^{**}
	(0.393)	(0.219)
Observations	50	50
\mathbb{R}^2	0.987	0.995
Adjusted R ²	0.978	0.992
Residual Std. Error ($df = 29$)	0.147	0.082
F Statistic (df = 20; 29)	112.336***	* 308.677***

VAR(10) Model - United States

	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	1.222***	-0.016
	(0.331)	(0.116)
LGDP - Lag 1	-0.524	1.252***
	(0.938)	(0.330)
LGDS - Lag 2	-0.599	0.070
	(0.407)	(0.143)
LGDP - Lag 2	0.940	-0.445
	(1.275)	(0.448)
LGDS - Lag 3	0.735^{*}	-0.008
	(0.406)	(0.142)
LGDP - Lag 3	-1.448	0.142
	(1.111)	(0.390)
LGDS - Lag 4	-0.927**	-0.008
	(0.416)	(0.146)
LGDP - Lag 4	1.731	0.019
	(1.098)	(0.386)
LGDS - Lag 5	0.777^{*}	-0.018
	(0.404)	(0.142)

LGDP - Lag 5	-0.668	0.118
	(1.032)	(0.362)
LGDS - Lag 6	-0.325	0.081
	(0.385)	(0.135)
LGDP - Lag 6	-0.254	-0.290
	(1.003)	(0.352)
LGDS - Lag 7	0.397	-0.051
	(0.371)	(0.130)
LGDP - Lag 7	-0.074	0.244
	(0.994)	(0.349)
LGDS - Lag 8	-0.246	0.149
	(0.341)	(0.120)
LGDP - Lag 8	0.683	-0.283
	(0.937)	(0.329)
LGDS - Lag 9	0.028	-0.180*
	(0.277)	(0.097)
LGDP - Lag 9	-0.551	0.192
	(0.861)	(0.303)
LGDS - Lag 10	-0.276	-0.009
	(0.213)	(0.075)
LGDP - Lag 10	0.331	0.027
	(0.535)	(0.188)
Constant	0.167	0.205
	(0.453)	(0.159)
Observations	50	50
\mathbb{R}^2	0.996	1.000
Adjusted R ²	0.993	0.999
Residual Std. Error ($df = 29$)	0.054	0.019
F Statistic (df = 20; 29)	335.462***	3,616.017***

Note: p < 0.1; p < 0.05; p < 0.01.

VAR(10) Model - Uruguay

	Dependen	Dependent Variable	
	LGDS	LGDP	
LGDS - Lag 1	0.268	0.020	
	(0.227)	(0.082)	
LGDP - Lag 1	0.451	1.146***	

	(0.609)	(0.220)
LGDS - Lag 2	0.214	0.217**
	(0.225)	(0.081)
LGDP - Lag 2	0.415	-0.339
	(0.872)	(0.315)
LGDS - Lag 3	-0.437*	-0.199**
	(0.244)	(0.088)
LGDP - Lag 3	0.391	0.048
	(0.912)	(0.330)
LGDS - Lag 4	0.069	0.052
	(0.254)	(0.092)
LGDP - Lag 4	-1.009	-0.299
	(0.912)	(0.330)
LGDS - Lag 5	0.038	0.170^{*}
	(0.246)	(0.089)
LGDP - Lag 5	0.746	0.095
	(0.893)	(0.323)
LGDS - Lag 6	0.164	-0.014
	(0.263)	(0.095)
LGDP - Lag 6	-0.892	0.099
	(0.866)	(0.313)
LGDS - Lag 7	-0.240	-0.070
	(0.252)	(0.091)
LGDP - Lag 7	1.450^{*}	0.112
	(0.813)	(0.294)
LGDS - Lag 8	0.047	0.051
	(0.246)	(0.089)
LGDP - Lag 8	-0.808	
	(0.831)	(0.300)
LGDS - Lag 9	-0.325	
	(0.226)	(0.082)
LGDP - Lag 9	-0.007	0.099
	(0.786)	
LGDS - Lag 10	-0.048	-0.144*
	(0.224)	, ,
LGDP - Lag 10	0.564	0.253
	(0.486)	, ,
Constant	-2.523	0.342

	(1.838)	(0.664)
Observations	50	50
R^2	0.896	0.982
Adjusted R ²	0.824	0.969
Residual Std. Error ($df = 29$)	0.440	0.159
F Statistic (df = 20; 29)	12.443***	78.307***

Note: **p* < 0.1; ***p* < 0.05; ****p* < 0.01.

VAR(10) Model - Venezuela, RB

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	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.682***	0.218**
	(0.184)	(0.094)
LGDP - Lag 1	-0.175	0.649***
	(0.396)	(0.202)
LGDS - Lag 2	0.084	0.029
	(0.212)	(0.108)
LGDP - Lag 2	-0.157	-0.131
	(0.469)	(0.240)
LGDS - Lag 3	0.197	-0.029
	(0.213)	(0.109)
LGDP - Lag 3	-0.082	-0.011
	(0.465)	(0.237)
LGDS - Lag 4	0.208	0.209^{*}
	(0.217)	(0.111)
LGDP - Lag 4	-0.357	0.070
	(0.463)	(0.237)
LGDS - Lag 5	0.012	-0.290**
	(0.225)	(0.115)
LGDP - Lag 5	0.641	0.102
	(0.489)	(0.250)
LGDS - Lag 6	0.128	0.397***
	(0.261)	(0.133)
LGDP - Lag 6	-0.572	-0.425
	(0.514)	(0.262)
LGDS - Lag 7	-0.133	-0.093
	(0.284)	(0.145)

LGDP - Lag 7	-0.001	0.053
LGDS - Lag 8	(0.502) 0.255	, , ,
LODS - Lag o	(0.283)	
LGDP - Lag 8	-0.259	-0.242
	(0.503)	(0.257)
LGDS - Lag 9	-0.287	-0.058
	(0.284)	(0.145)
LGDP - Lag 9	-0.122	0.409
	(0.522)	(0.266)
LGDS - Lag 10	0.740***	0.160
	(0.253)	(0.129)
LGDP - Lag 10	-0.012	-0.358*
	(0.389)	(0.199)
Constant	3.024**	2.035***
	(1.210)	(0.618)
Observations	50	50
\mathbb{R}^2	0.874	0.966
Adjusted R ²	0.788	0.942
Residual Std. Error ($df = 29$)	0.315	
F Statistic (df = 20; 29)	10.091***	41.145***

Note: **p* < 0.1; ***p* < 0.05; ****p* < 0.01.

VAR(10) Model - Zimbabwe

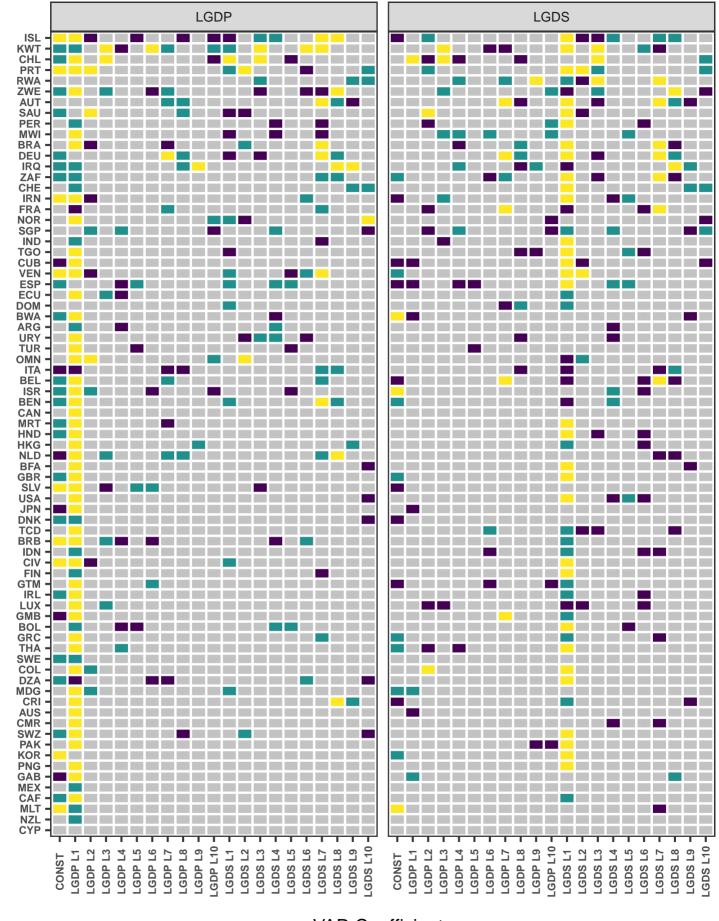
	Dependent Variable	
	LGDS	LGDP
LGDS - Lag 1	0.488*	-0.074
	(0.244)	(0.044)
LGDP - Lag 1	1.957	1.350***
	(1.265)	(0.227)
LGDS - Lag 2	0.580^{**}	0.100^{*}
	(0.276)	(0.050)
LGDP - Lag 2	-4.058**	-0.727**
	(1.891)	(0.339)
LGDS - Lag 3	-0.081	0.014
	(0.284)	(0.051)
LGDP - Lag 3	1.353	0.052

	(2.128)	(0.382)
LGDS - Lag 4	-0.096	
2	(0.329)	
LGDP - Lag 4	3.196	-0.042
2	(2.141)	
LGDS - Lag 5	0.126	-0.106*
2	(0.303)	
LGDP - Lag 5	-2.315	0.708^{*}
C	(1.971)	(0.353)
LGDS - Lag 6	0.346	0.105^{*}
G	(0.289)	(0.052)
LGDP - Lag 6	-2.527	-0.871**
•	(1.944)	(0.349)
LGDS - Lag 7	-1.042***	-0.183***
	(0.320)	(0.057)
LGDP - Lag 7	2.394	0.566
	(2.069)	(0.371)
LGDS - Lag 8	0.176	0.052
	(0.372)	(0.067)
LGDP - Lag 8	3.145	0.001
	(2.159)	(0.387)
LGDS - Lag 9	0.798^{*}	0.002
	(0.413)	(0.074)
LGDP - Lag 9	-4.319**	0.001
	(2.074)	(0.372)
LGDS - Lag 10	-0.445	0.029
	(0.341)	(0.061)
LGDP - Lag 10	1.273	-0.210
	(1.403)	(0.252)
Constant	-0.070	1.348**
	(2.874)	(0.515)
Observations	50	50
R^2	0.799	0.933
Adjusted R ²	0.661	0.886
Residual Std. Error (df = 29)	0.755	0.135
F Statistic (df = 20; 29)	5.777***	20.073***
N_{oto} : *n < 0.1: **n < 0.05: ***n < 0.01		

Note: p < 0.1; p < 0.05; p < 0.01.

VAR(10) Models by Country

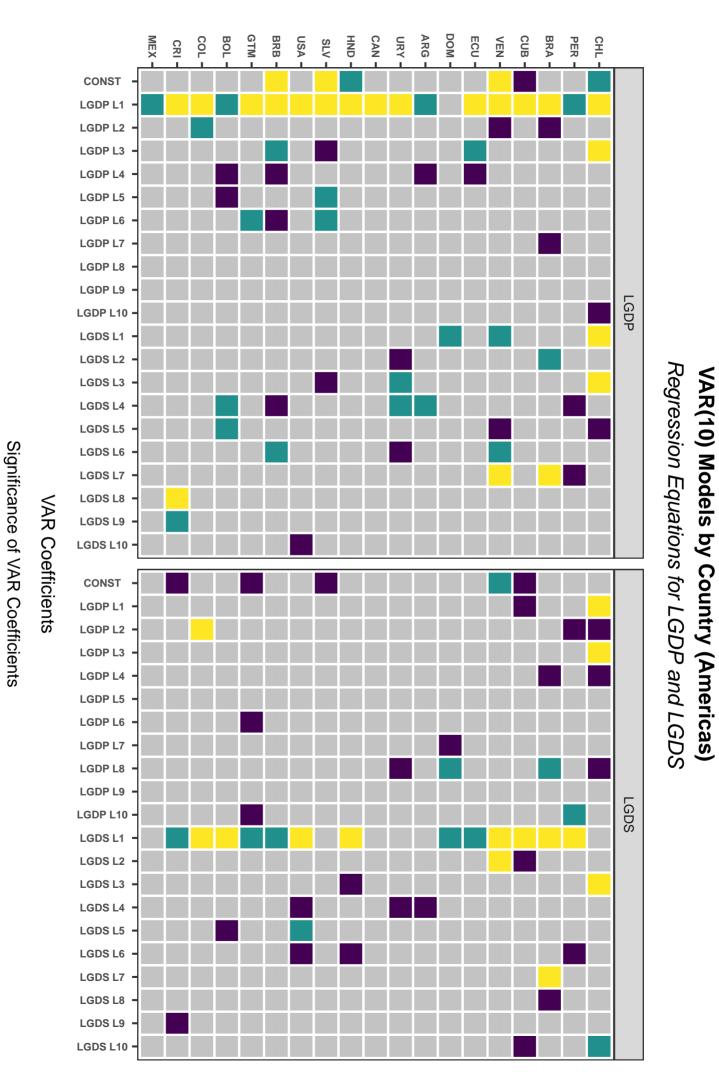
Regression Equations for LGDP and LGDS



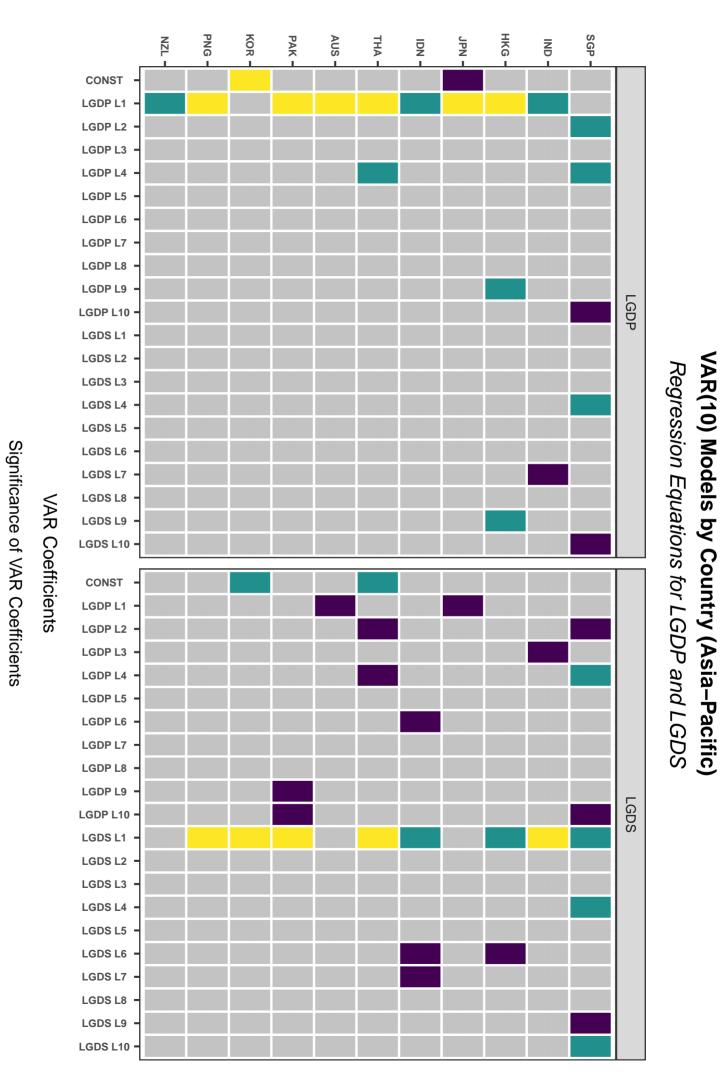
VAR Coefficients

Significance of VAR Coefficients

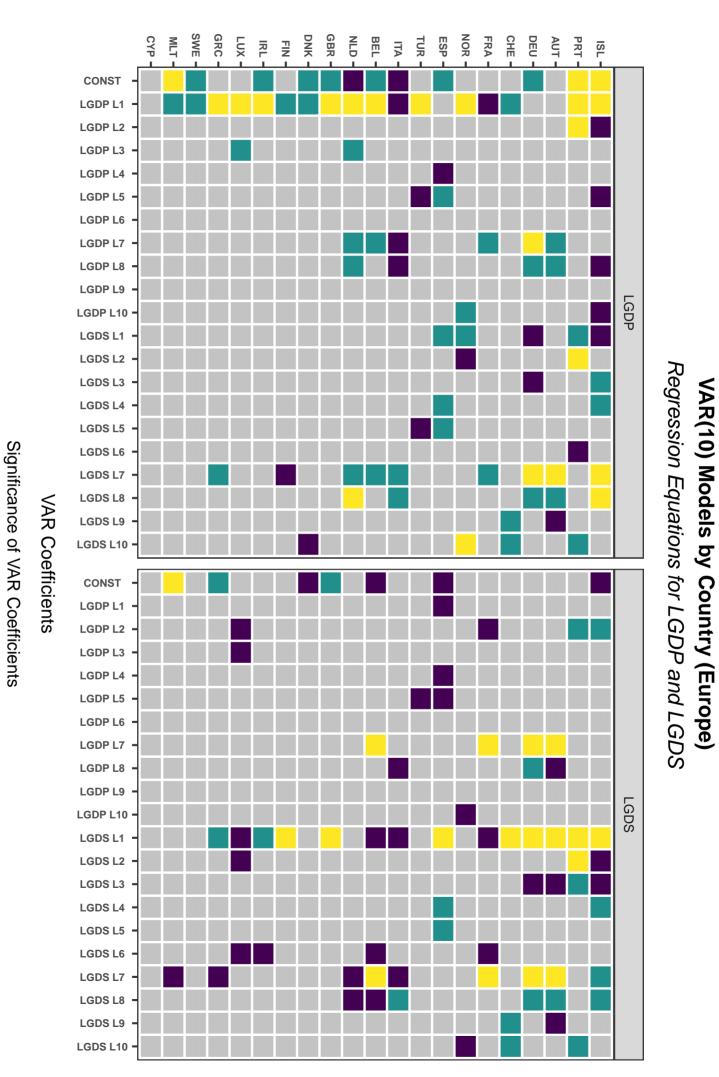
p < 0.01 p < 0.05 p < 0.1



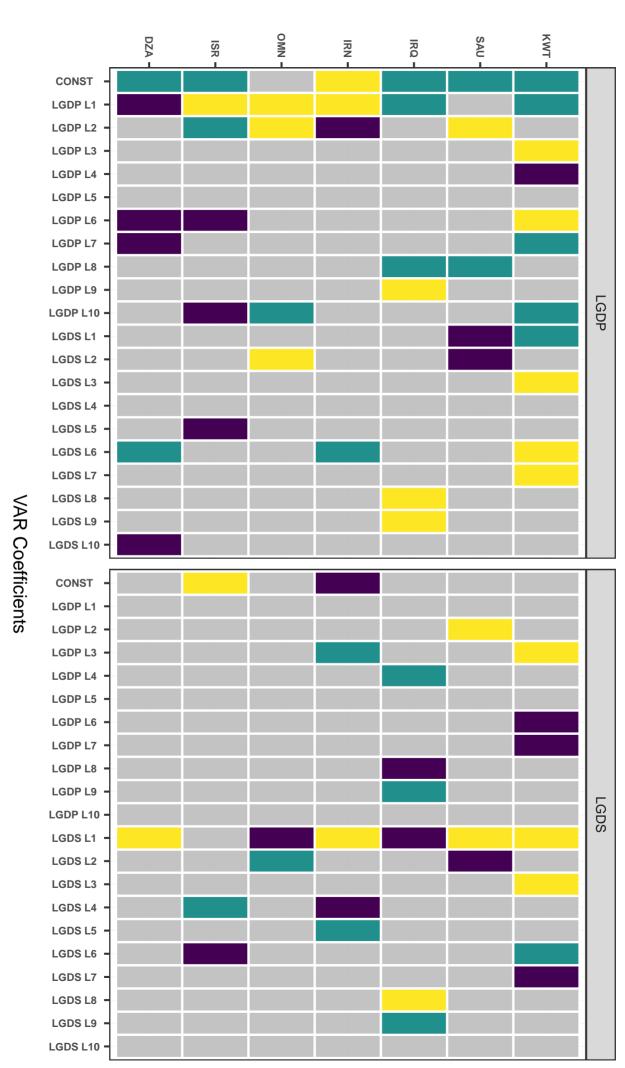
p<0.01 p<0.05 p<0.1



p < 0.01 p < 0.05 p < 0.1



p<0.01 p<0.05 p<0.1



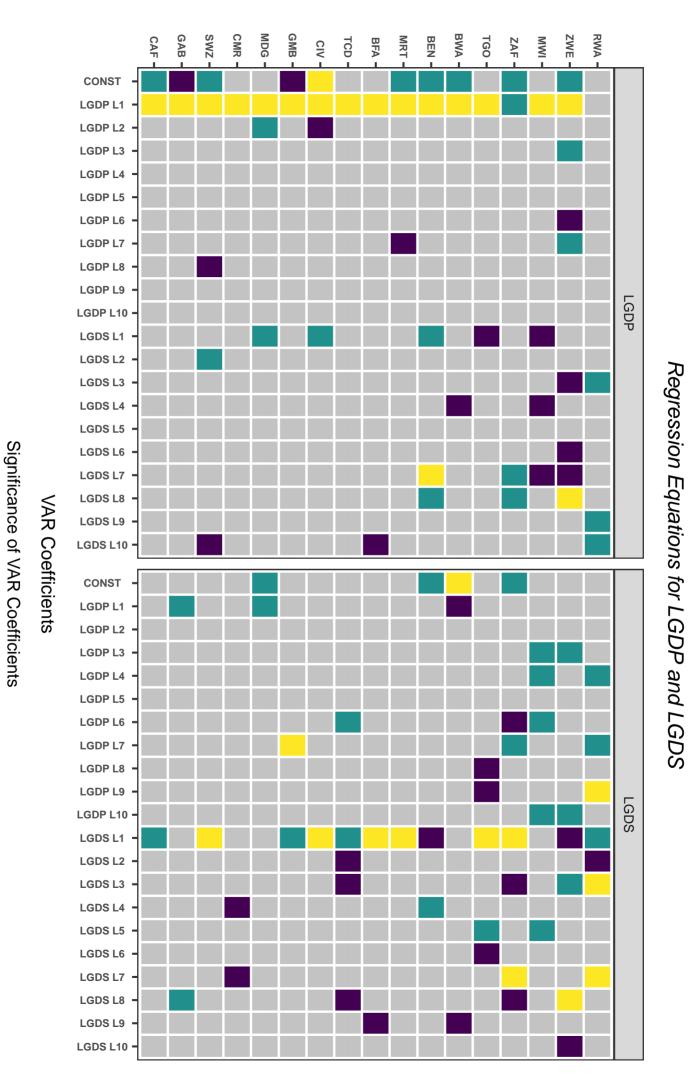
p < 0.01 p < 0.05

p < 0.1

Significance of VAR Coefficients

VAR(10) Models by Country (Middle East and North Africa)

Regression Equations for LGDP and LGDS

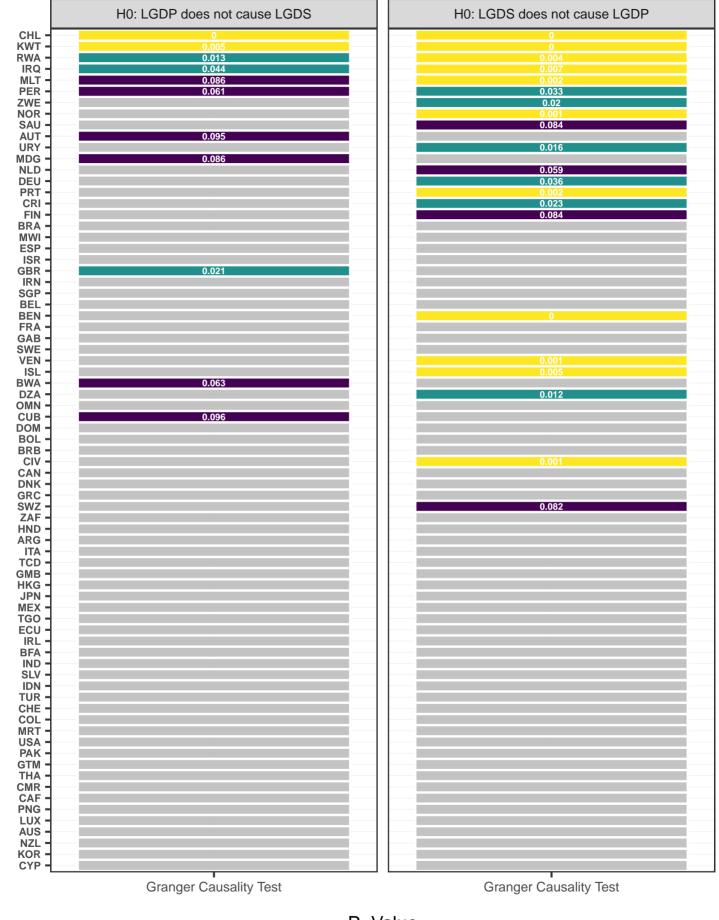


p < 0.01 p < 0.05 p < 0.1

VAR(10) Models by Country (Sub-Saharan Africa)

VAR(10) Granger Causality Tests

Testing Bidirectional Causation

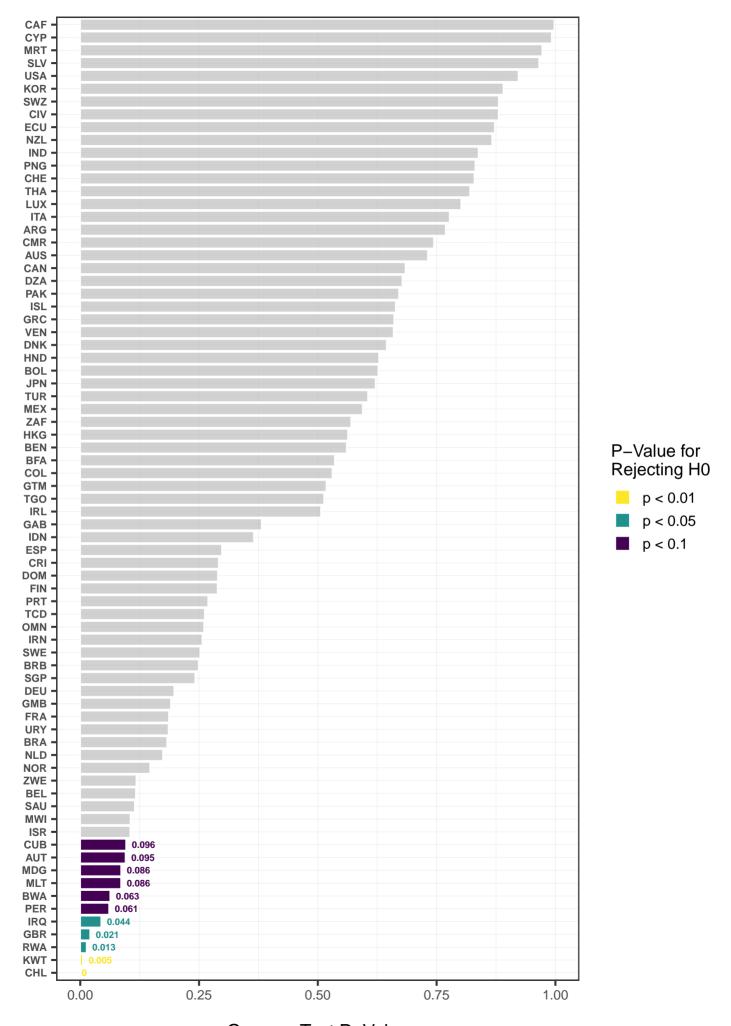


P-Value

P-Value for Rejecting H0

p < 0.01 p < 0.05 p < 0.1

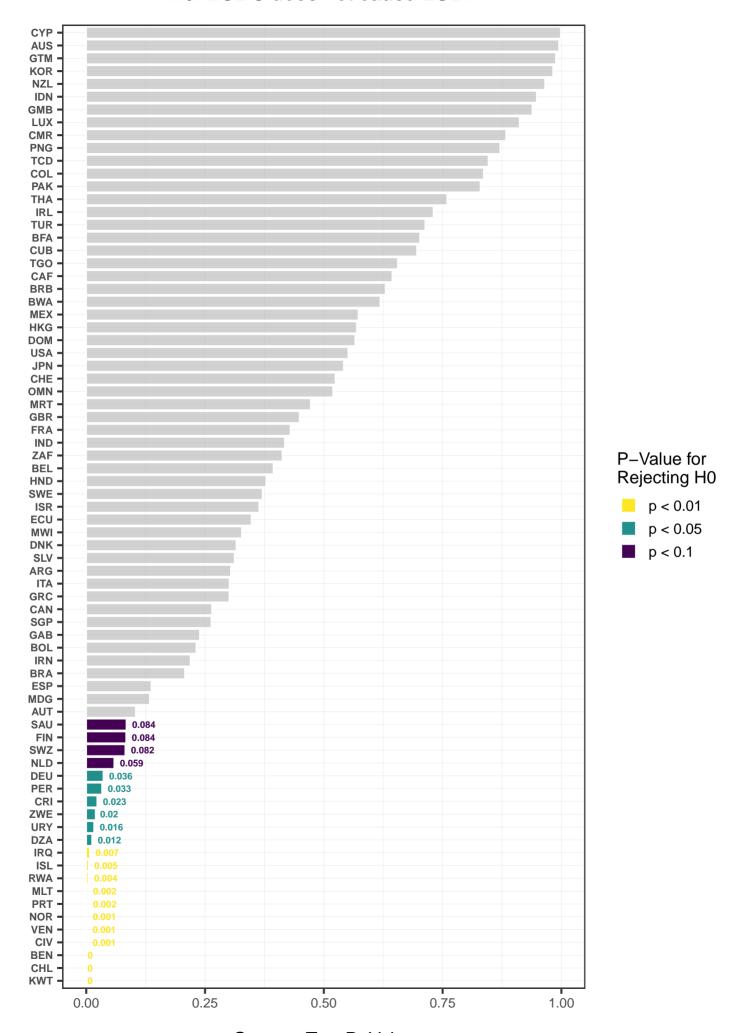
H0: LGDP does not cause LGDS



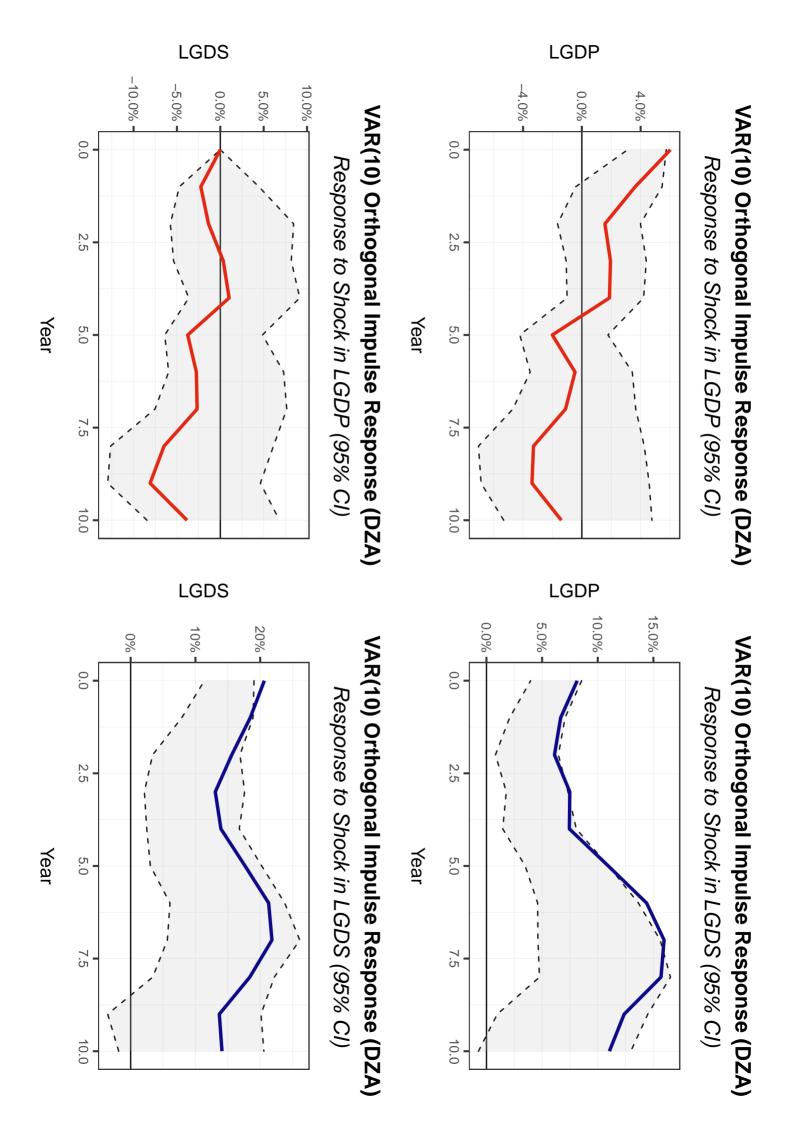
Granger Test P-Value

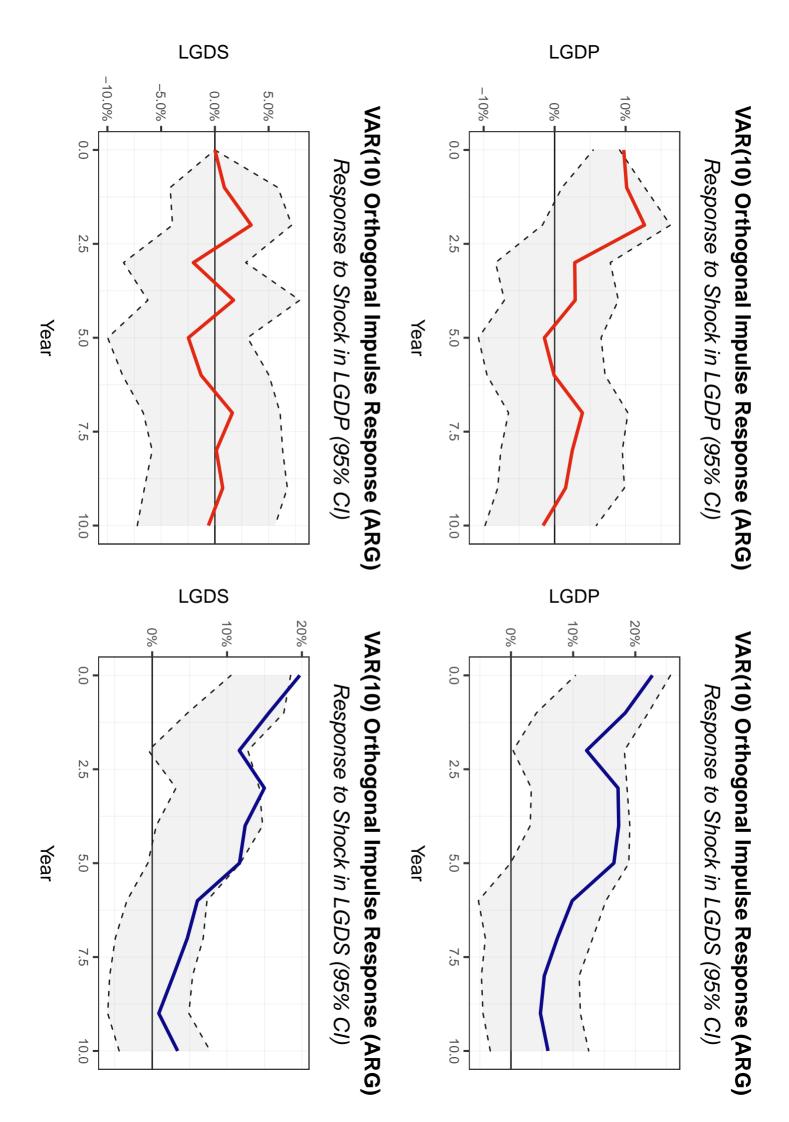


H0: LGDS does not cause LGDP

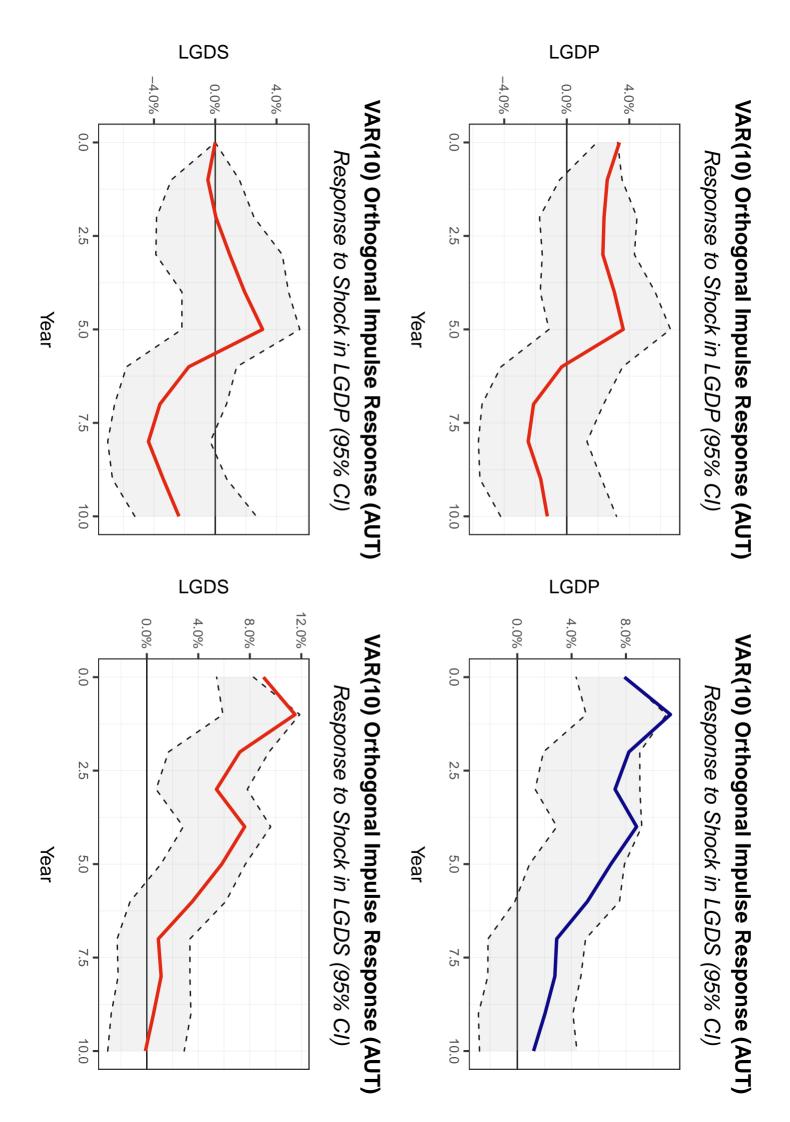


Granger Test P-Value

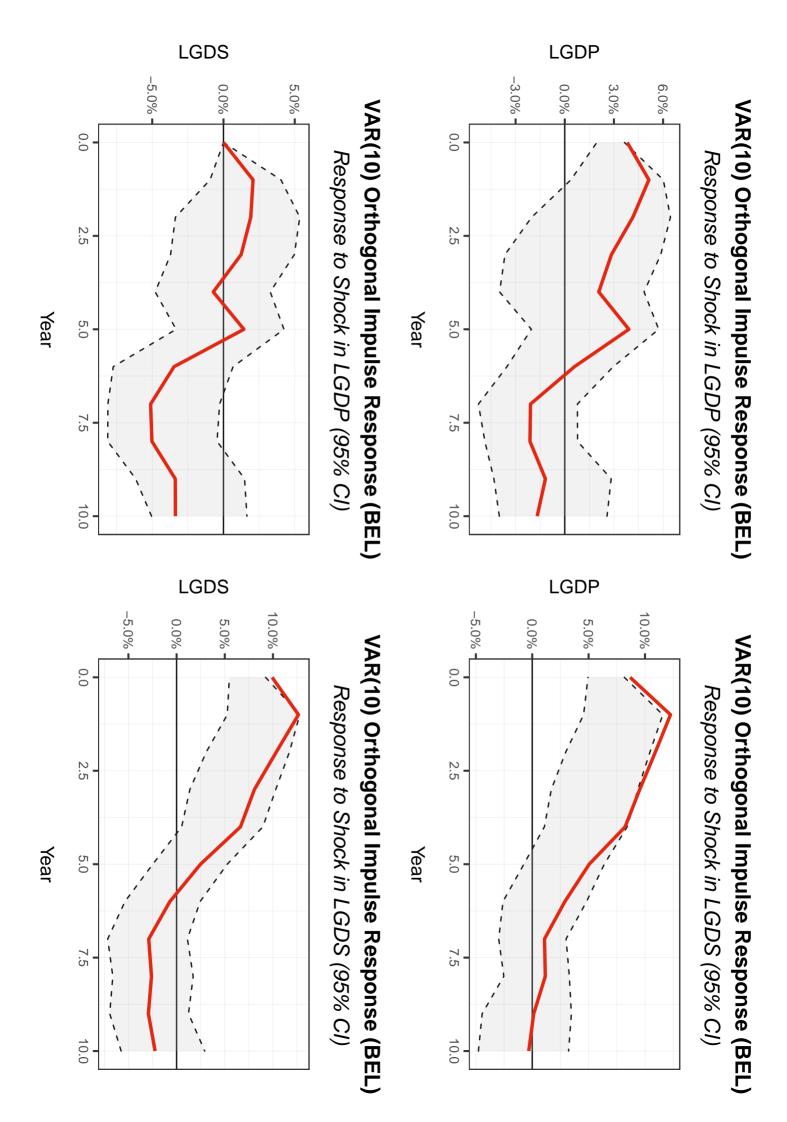




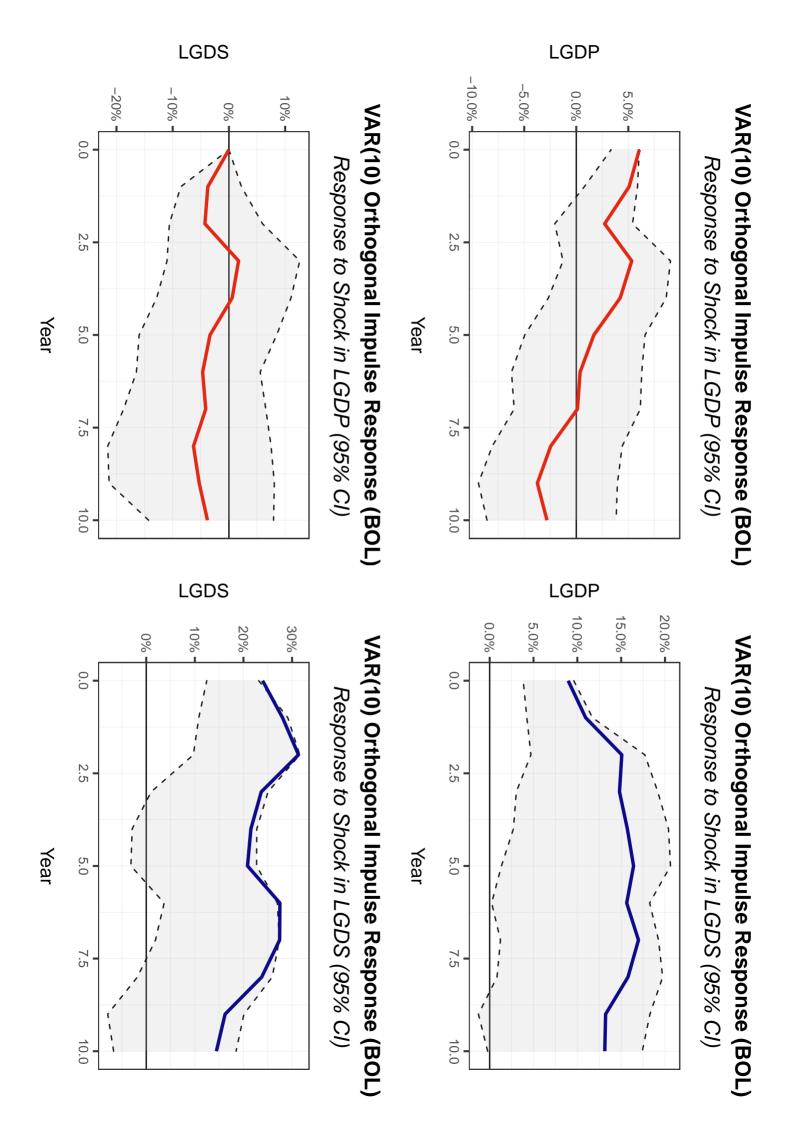
LGDS LGDP -5.0% 10.0% --5.0%10.0% -0.0% 5.0% 0.0% 5.0% -VAR(10) Orthogonal Impulse Response (AUS) VAR(10) Orthogonal Impulse Response (AUS) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP -5.0% 15.0% --5.0% 10.0% 15.0% -10.0% 5.0% 5.0% 0.0% 0.0% VAR(10) Orthogonal Impulse Response (AUS) VAR(10) Orthogonal Impulse Response (AUS) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

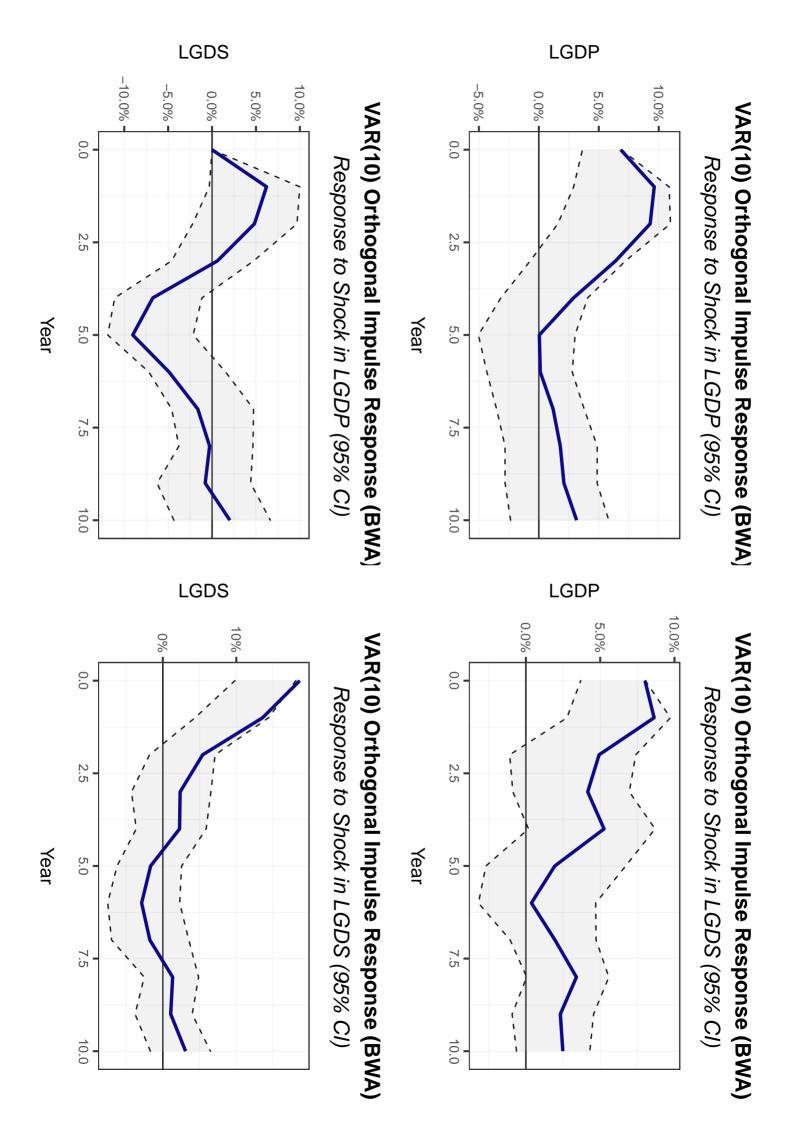


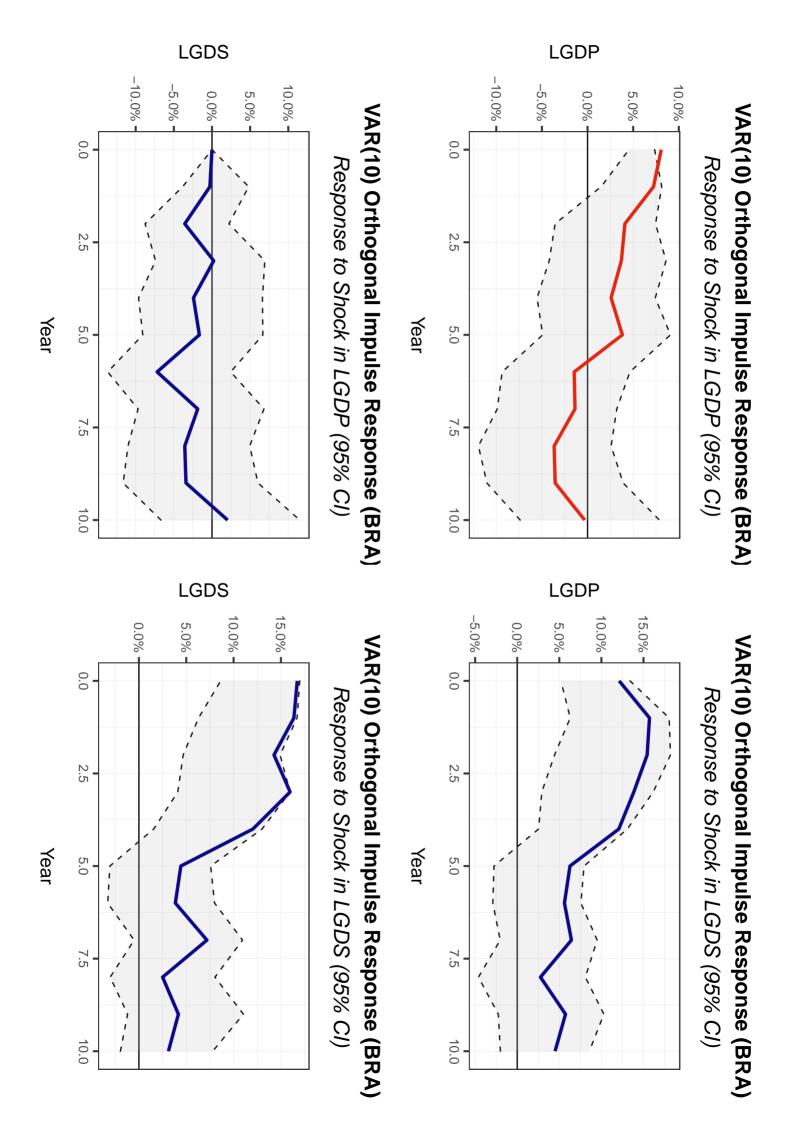
LGDS LGDP 12.0% --10% -6.0% -0.0% 3.0% -9.0% 10% 20% -0% VAR(10) Orthogonal Impulse Response (BRB) VAR(10) Orthogonal Impulse Response (BRB) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP -3.0% 0.0% 3.0% 6.0% 9.0% 20% 30% 10% 0% VAR(10) Orthogonal Impulse Response (BRB) VAR(10) Orthogonal Impulse Response (BRB) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0



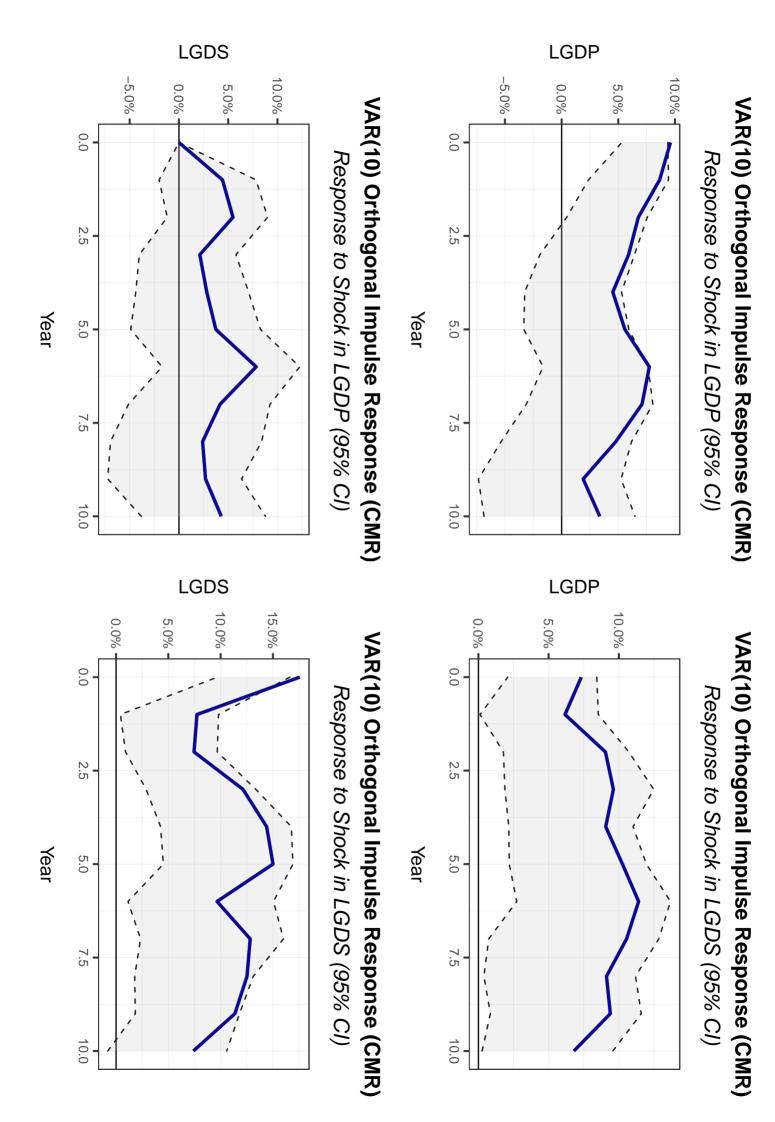
LGDS LGDP 6.0% 9.0% -0.0% 3.0% 20% 40% 0% VAR(10) Orthogonal Impulse Response (BEN) VAR(10) Orthogonal Impulse Response (BEN) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDP **LGDS** -5.0% 10.0% 0.0% 5.0% 30% 60% 90% 0% VAR(10) Orthogonal Impulse Response (BEN) VAR(10) Orthogonal Impulse Response (BEN) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0





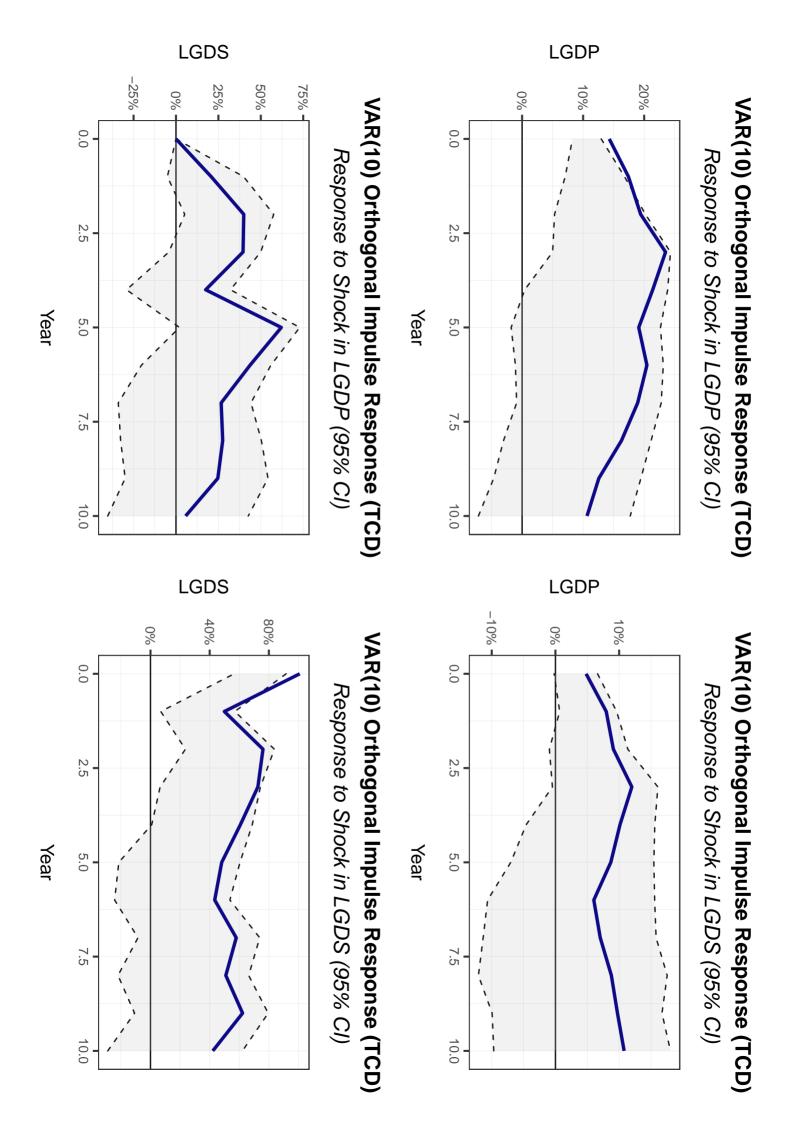


LGDS LGDP 10.0% -20.0% 15.0% --25% 5.0% 0.0% 25% 50% • 0% VAR(10) Orthogonal Impulse Response (BFA) VAR(10) Orthogonal Impulse Response (BFA) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS **LGDP** -5.0% 10.0% 0.0% 5.0% 50% 0% VAR(10) Orthogonal Impulse Response (BFA) VAR(10) Orthogonal Impulse Response (BFA) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

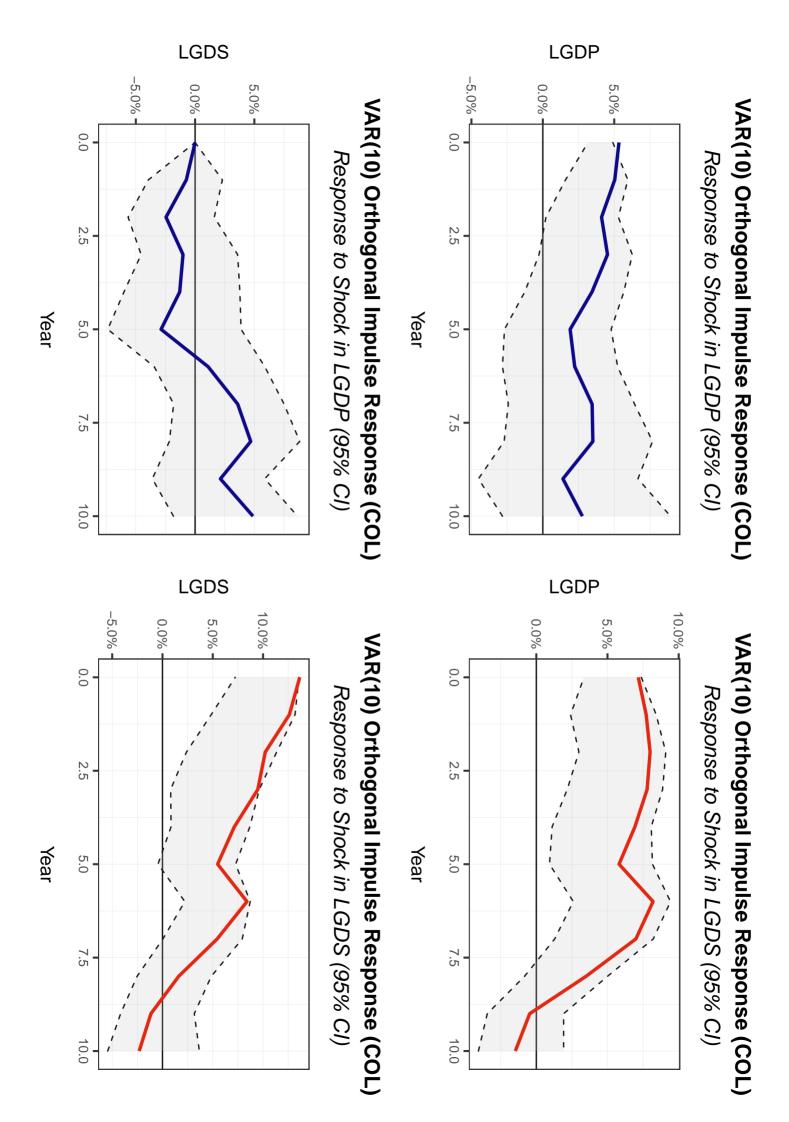


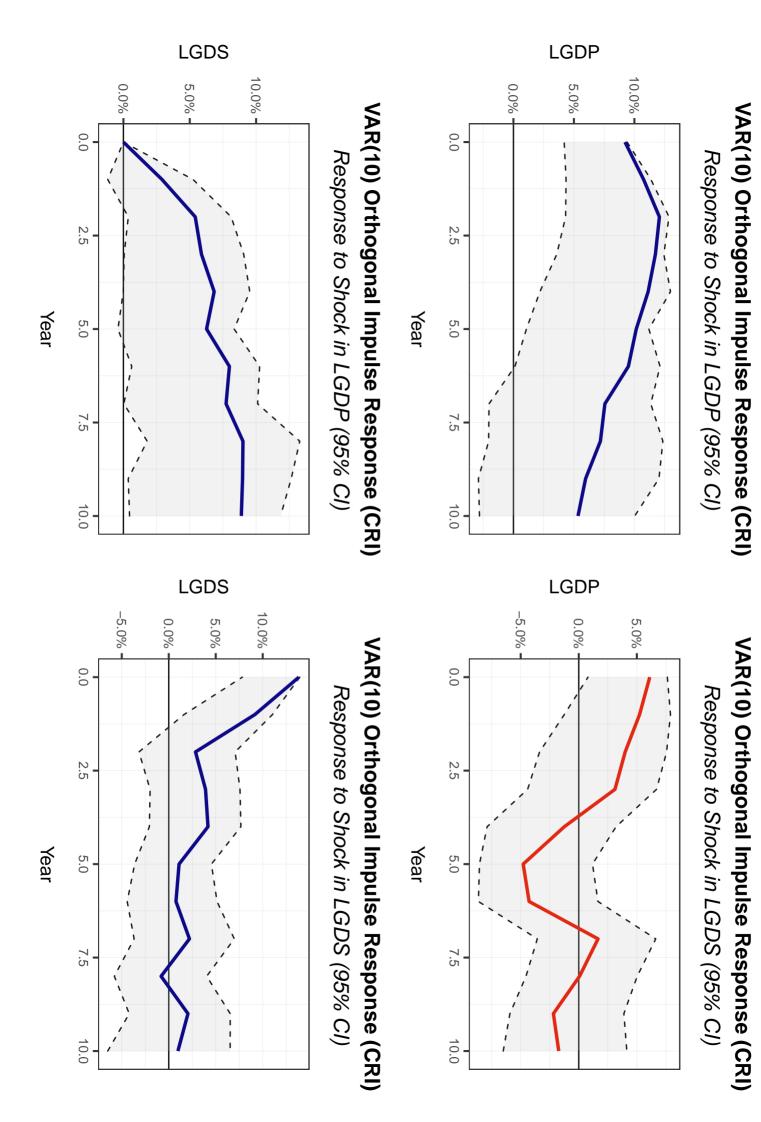
LGDS LGDP -4.0%-2.5%-5.0% -8.0% -0.0% 0.0% 5.0% 4.0% -2.5% VAR(10) Orthogonal Impulse Response (CAN) VAR(10) Orthogonal Impulse Response (CAN) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS **LGDP** 12.5% 10.0% 10.0% 0.0% 5.0% 5.0% 7.5% 0.0% 2.5% VAR(10) Orthogonal Impulse Response (CAN) VAR(10) Orthogonal Impulse Response (CAN) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

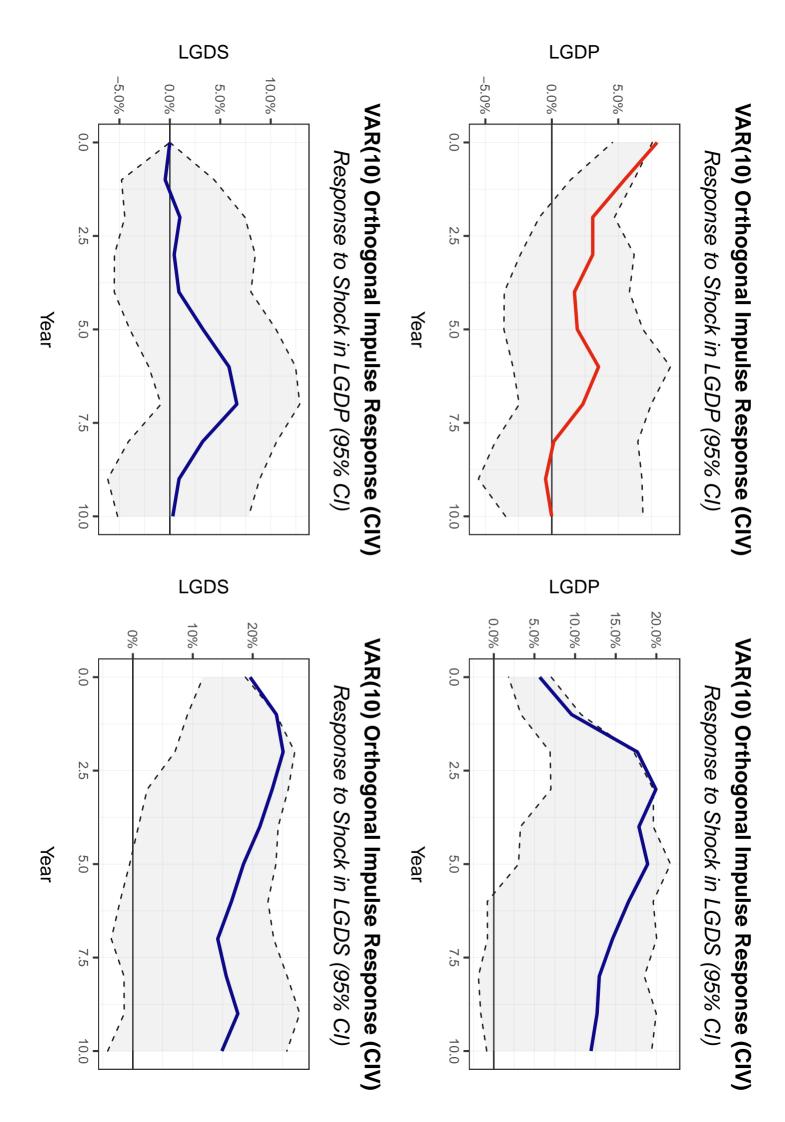
LGDS LGDP -5.0% 10.0% 15.0% --20% 5.0% 0.0% 20% -0% VAR(10) Orthogonal Impulse Response (CAF) VAR(10) Orthogonal Impulse Response (CAF) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 **LGDS LGDP** -15.0% -10.0% -5.0% 5.0% -100% 0.0% 50% 0% VAR(10) Orthogonal Impulse Response (CAF) VAR(10) Orthogonal Impulse Response (CAF) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0



LGDS LGDP -10.0%20.0% -10.0% 0.0% -10% 10% 0% VAR(10) Orthogonal Impulse Response (CHL) VAR(10) Orthogonal Impulse Response (CHL) 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDP **LGDS** -10% -10% 10% 20% 10% 0% 0% VAR(10) Orthogonal Impulse Response (CHL) VAR(10) Orthogonal Impulse Response (CHL) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0



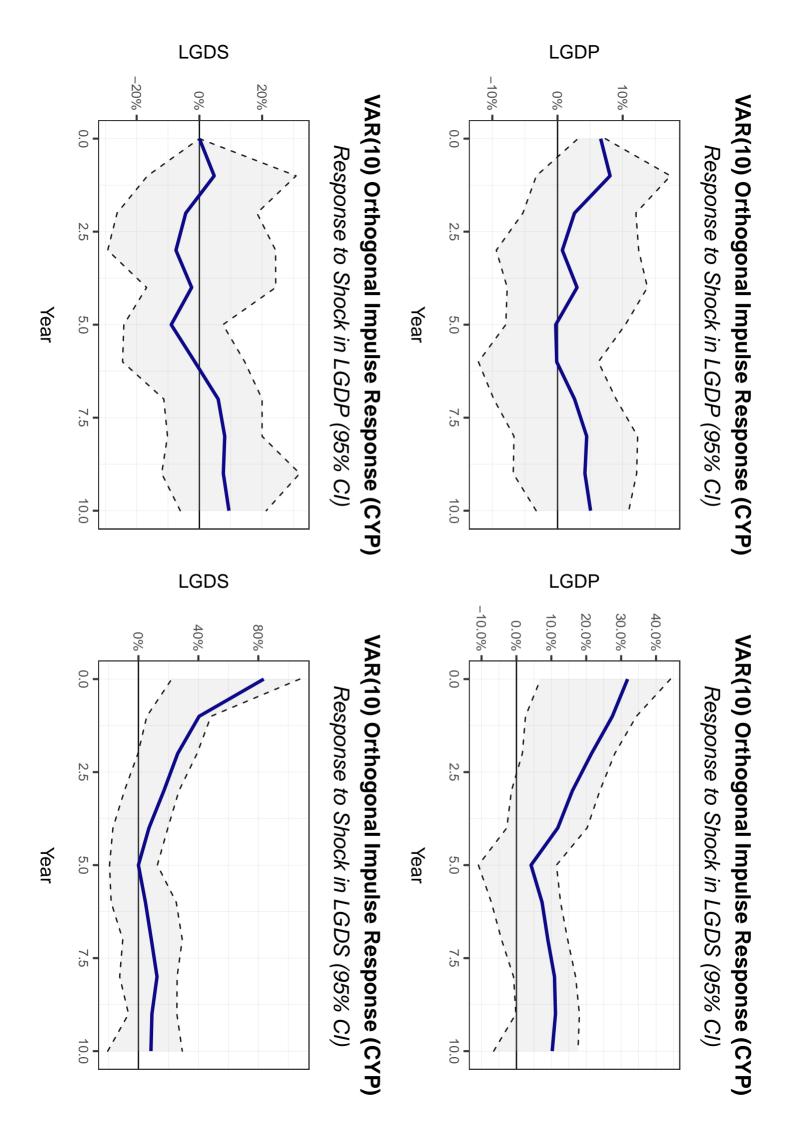


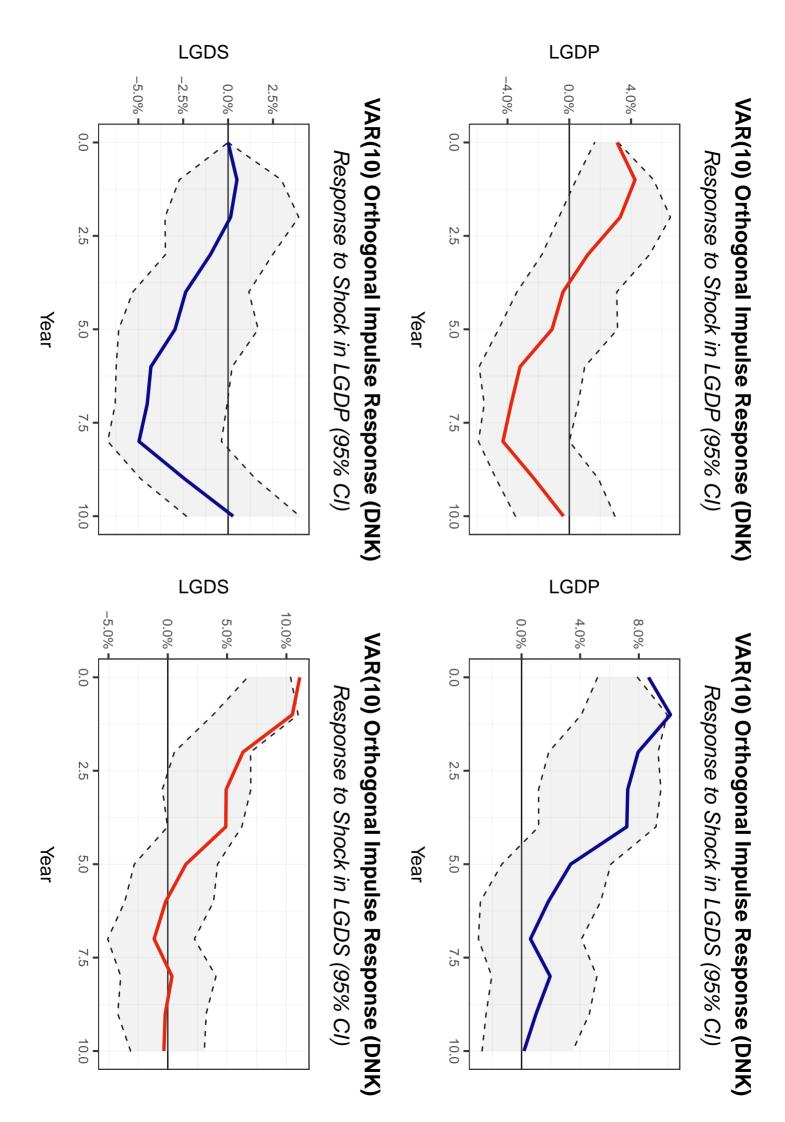


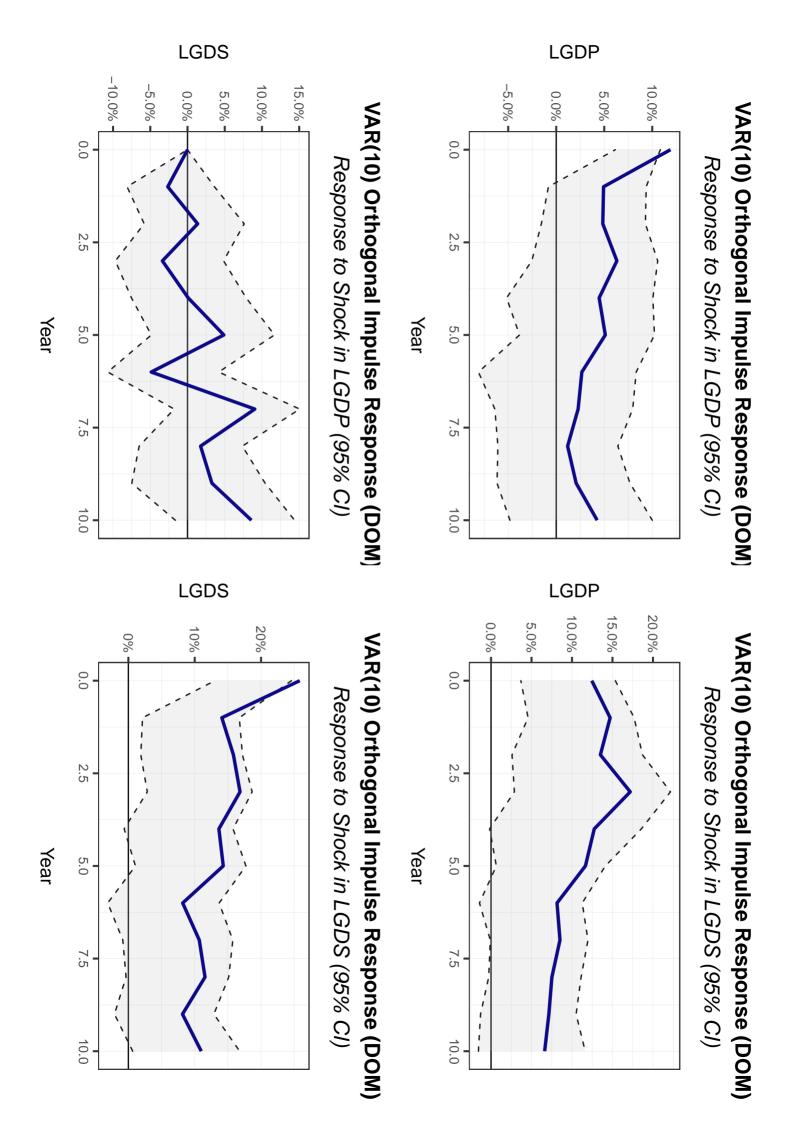
LGDS LGDP 6.0% 0.0% 9.0% 3.0% 10% 20% -0% VAR(10) Orthogonal Impulse Response (CUB) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 **LGDS LGDP** 10.0% -10% 5.0% 0.0% 10% 20% 30% 0% VAR(10) Orthogonal Impulse Response (CUB) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

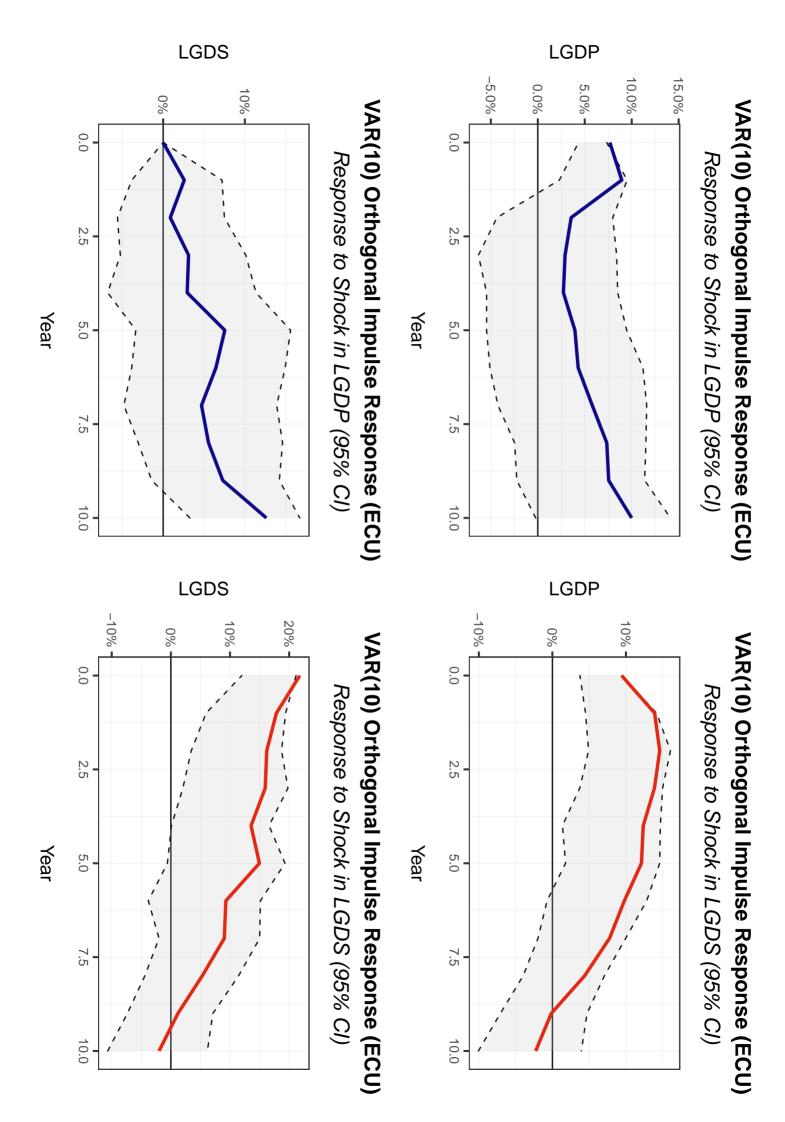
VAR(10) Orthogonal Impulse Response (CUB)

VAR(10) Orthogonal Impulse Response (CUB)









LGDS LGDP -10.0% -20.0% 30.0% -20.0% 10.0% 0.0% 6.0% 0.0% 2.0% 4.0% VAR(10) Orthogonal Impulse Response (SLV) VAR(10) Orthogonal Impulse Response (SLV) 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP -7.5% -2.5%-5.0% 100% 0.0% 0% VAR(10) Orthogonal Impulse Response (SLV) VAR(10) Orthogonal Impulse Response (SLV) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS LGDP 10.0% -5.0%-50% --25% 5.0% 0.0% 25% 0% VAR(10) Orthogonal Impulse Response (SWZ) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 15.0% -5.0% 10.0% 100% 5.0% 0.0% 50% 0% VAR(10) Orthogonal Impulse Response (SWZ) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

VAR(10) Orthogonal Impulse Response (SWZ)

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LGDS LGDP -10.0% -10.0% -5.0% -5.0% 5.0% -0.0% 5.0% -0.0% VAR(10) Orthogonal Impulse Response (FIN) VAR(10) Orthogonal Impulse Response (FIN) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS **LGDP** 10.0% -10.0% -5.0% 5.0% 7.5% -0.0% 0.0% 2.5% VAR(10) Orthogonal Impulse Response (FIN) VAR(10) Orthogonal Impulse Response (FIN) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

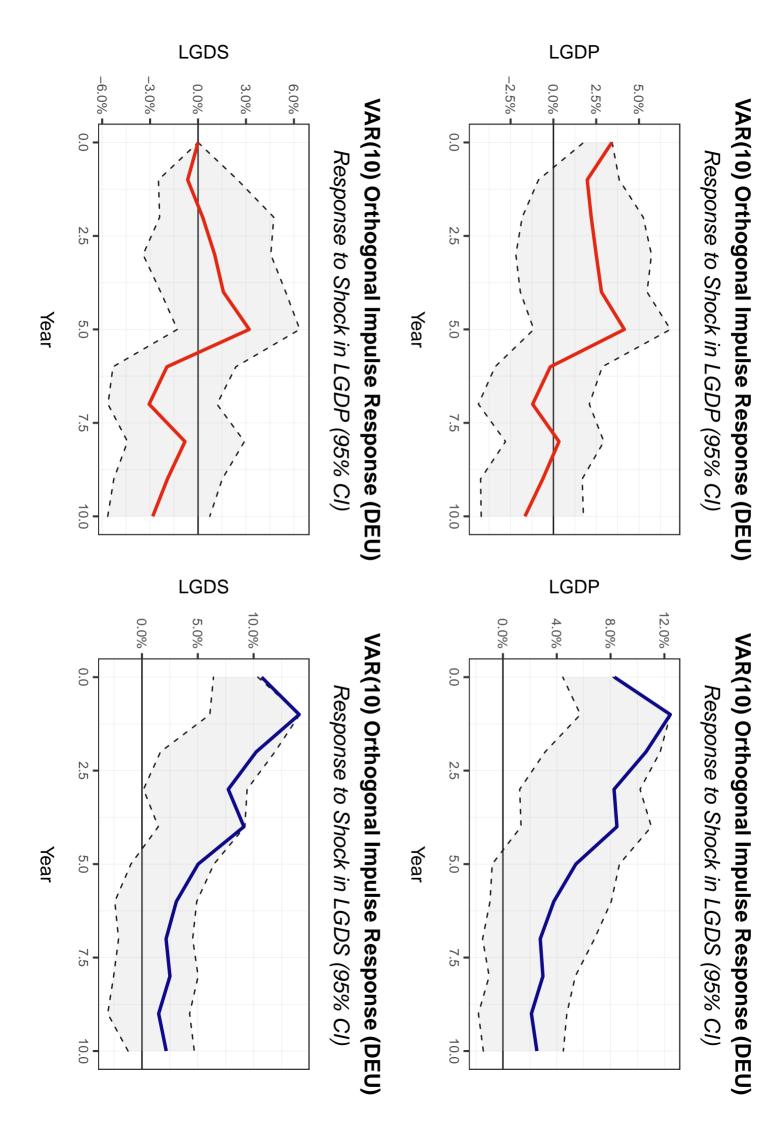
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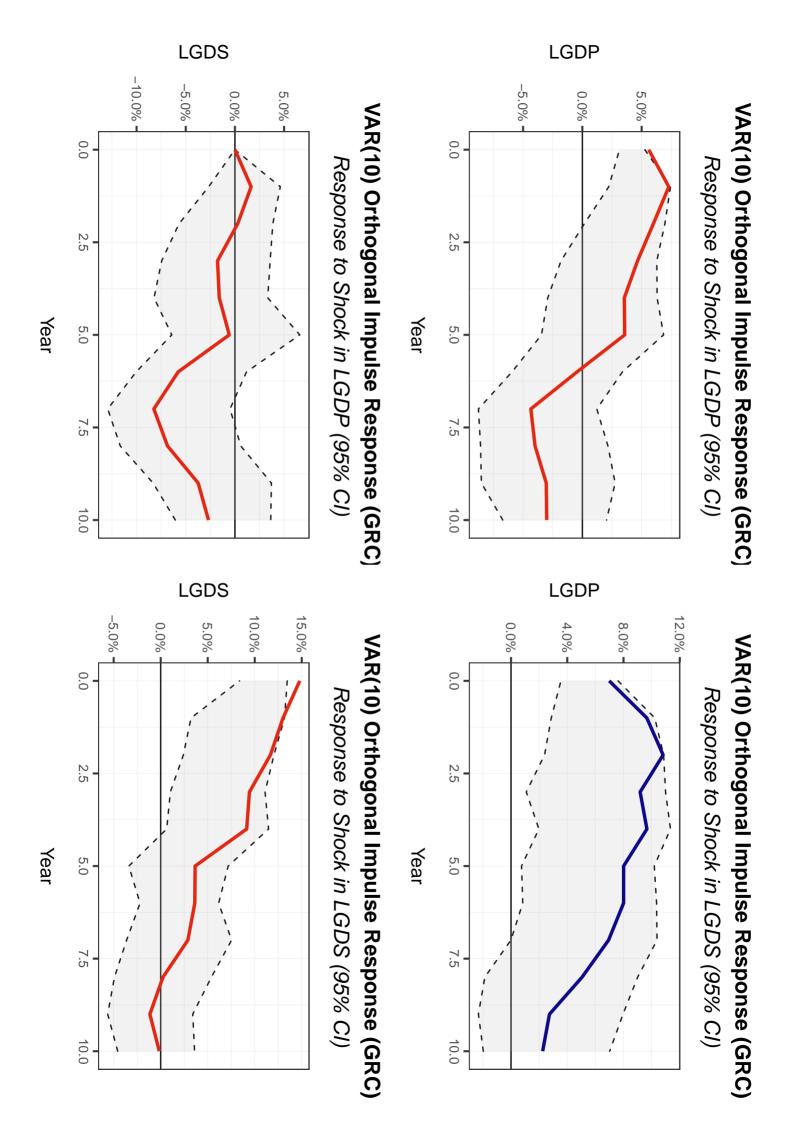
LGDS LGDP 15.0% --5.0% -5.0%10.0% 10.0% -5.0% 5.0% 0.0% 0.0% VAR(10) Orthogonal Impulse Response (GAB) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS **LGDP** 10.0% 15.0% -5.0% 5.0% 0.0% 10% 20% 30% 0% VAR(10) Orthogonal Impulse Response (GAB) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

VAR(10) Orthogonal Impulse Response (GAB)

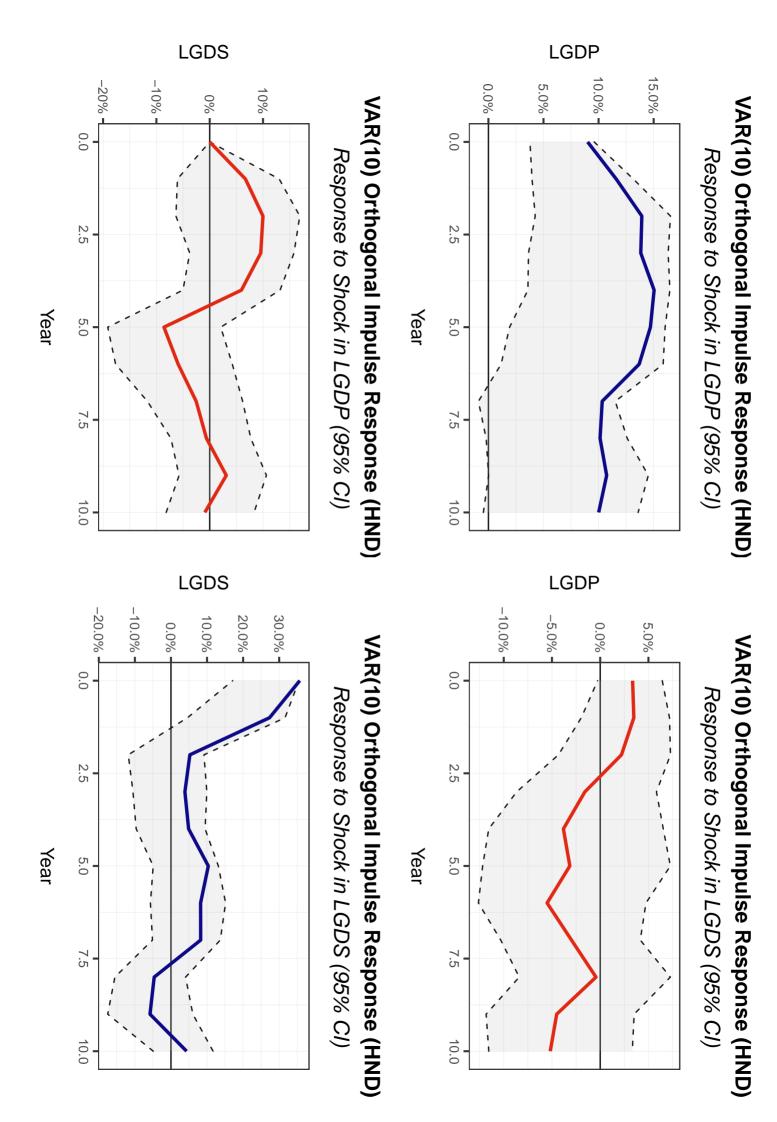
VAR(10) Orthogonal Impulse Response (GAB)

LGDS LGDP -5.0%20.0% -10.0% 15.0% --50% 0.0% 5.0% 50% 0% VAR(10) Orthogonal Impulse Response (GMB) VAR(10) Orthogonal Impulse Response (GMB) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 **LGDS LGDP** -10.0% -5.0% 10.0% 15.0% -50% 100% 0.0% 5.0% 50% 0% VAR(10) Orthogonal Impulse Response (GMB) VAR(10) Orthogonal Impulse Response (GMB) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0





LGDS LGDP 10.0% 15.0% -5.0% 0.0% 10% -0% VAR(10) Orthogonal Impulse Response (GTM) VAR(10) Orthogonal Impulse Response (GTM) 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP -4.0%-10% 0.0% 8.0% 4.0% 10% 20% 0% VAR(10) Orthogonal Impulse Response (GTM) VAR(10) Orthogonal Impulse Response (GTM) 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0



LGDS LGDP -2.5%· -6.0% -3.0% -7.5% -5.0%0.0% 0.0% 6.0% -2.5% -3.0% -VAR(10) Orthogonal Impulse Response (HKG) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 **LGDS LGDP** 6.0% 0.0% 9.0% 0.0% 5.0% 3.0% 2.5% 7.5% VAR(10) Orthogonal Impulse Response (HKG) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

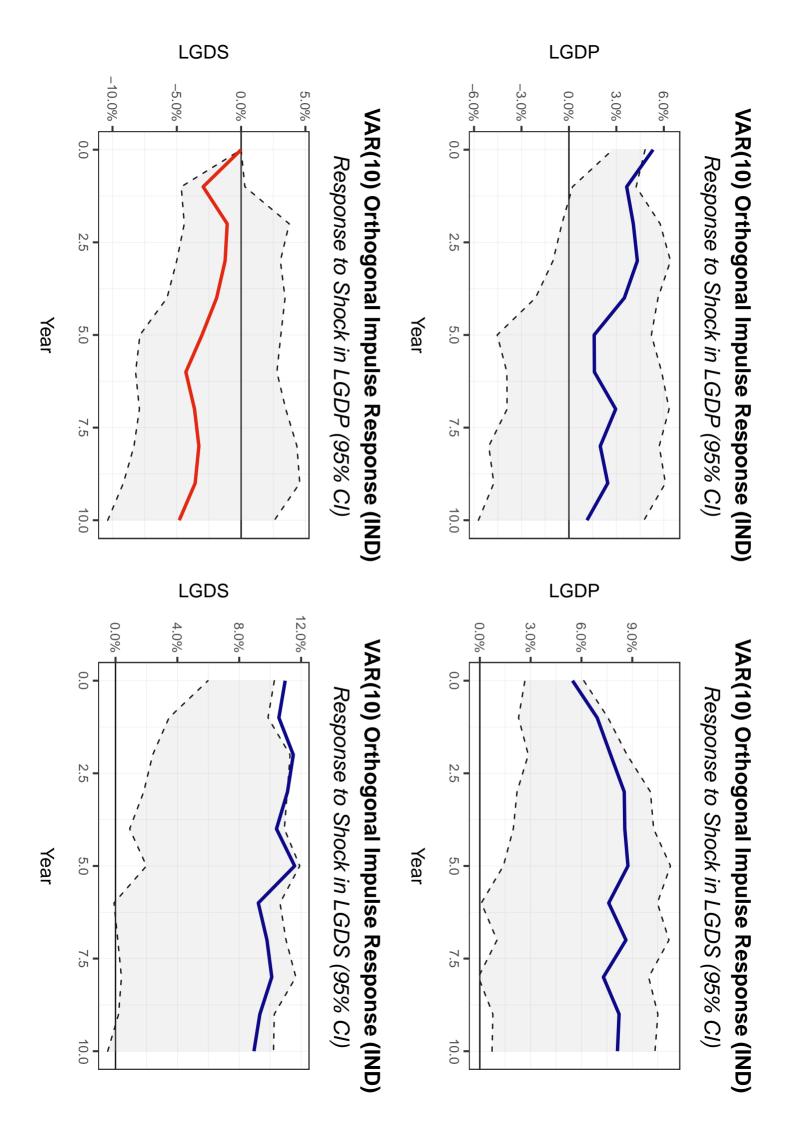
VAR(10) Orthogonal Impulse Response (HKG)

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LGDS LGDP -4.0%10.0% --5.0% 0.0% 0.0% 5.0% 4.0% VAR(10) Orthogonal Impulse Response (ISL) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 10.0% 15.0% 10.0% 0.0% 5.0% 5.0% 0.0% VAR(10) Orthogonal Impulse Response (ISL) 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

VAR(10) Orthogonal Impulse Response (ISL)

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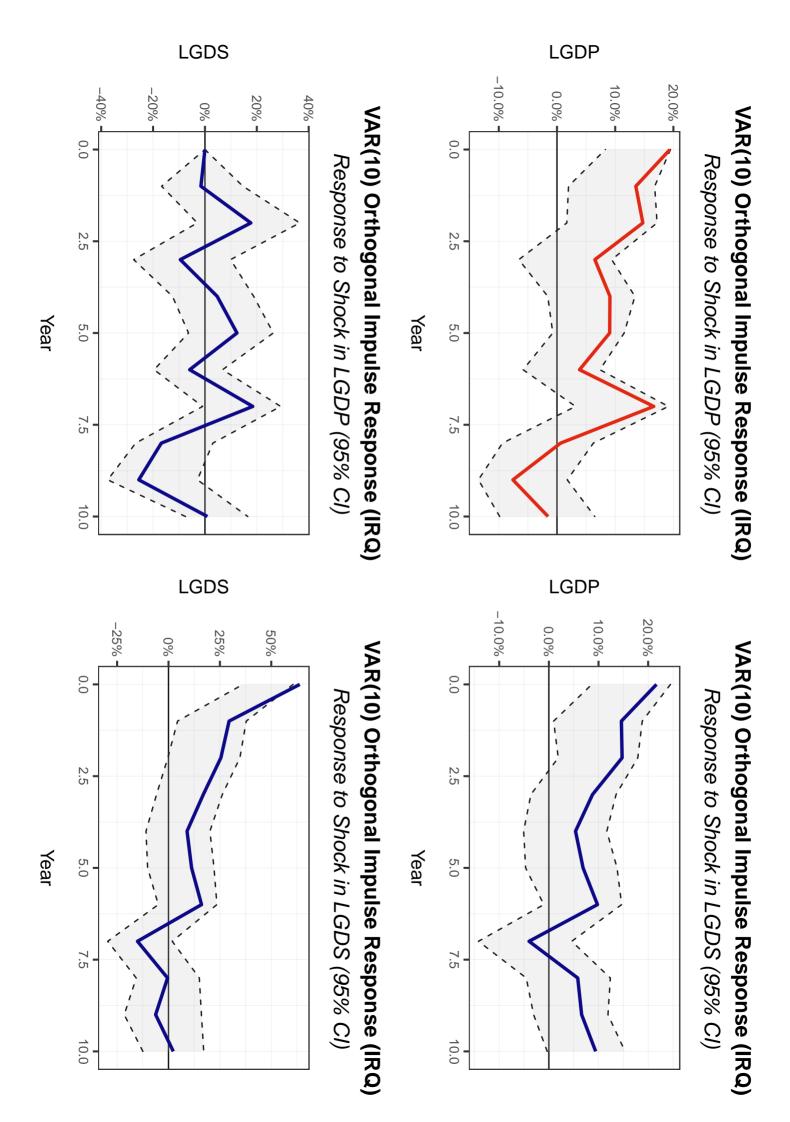


LGDS LGDP -5.0% 10.0% --3.0%0.0% 5.0% 3.0% 0.0% 6.0% 9.0% -VAR(10) Orthogonal Impulse Response (IDN) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 10% 10% 20% 30% 20% 0% 0% VAR(10) Orthogonal Impulse Response (IDN) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

VAR(10) Orthogonal Impulse Response (IDN)

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LGDS LGDP -10.0% -5.0% 10.0% 15.0% --10% 0.0% 5.0% -20% 10% 0% VAR(10) Orthogonal Impulse Response (IRN) VAR(10) Orthogonal Impulse Response (IRN) 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS **LGDP** 10.0% -15.0% -5.0% 0.0% 5.0% 20% 10% 0% VAR(10) Orthogonal Impulse Response (IRN) VAR(10) Orthogonal Impulse Response (IRN) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0



LGDS LGDP -2.5%-2.0%-5.0% -0.0% 5.0% -0.0% 2.0% 2.5% 4.0% 6.0% -VAR(10) Orthogonal Impulse Response (IRL) VAR(10) Orthogonal Impulse Response (IRL) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS **LGDP** 10.0% -5.0% 15.0% 5.0% 4.0% 0.0% 8.0% 0.0% VAR(10) Orthogonal Impulse Response (IRL) VAR(10) Orthogonal Impulse Response (IRL) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS LGDP -3.0% · 3.0% 0.0% 6.0% 0.0% 2.0% 4.0% 6.0% VAR(10) Orthogonal Impulse Response (ISR) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS **LGDP** 0.0% 2.5% 5.0% 7.5% 10% 20% 0% VAR(10) Orthogonal Impulse Response (ISR) 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

VAR(10) Orthogonal Impulse Response (ISR)

VAR(10) Orthogonal Impulse Response (ISR)

LGDS LGDP -5.0%10.0% --2.5%5.0% 0.0% 0.0% 2.5% 5.0% 7.5% -VAR(10) Orthogonal Impulse Response (ITA) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 10.0% 10.0% 0.0% 5.0% 0.0% 5.0% VAR(10) Orthogonal Impulse Response (ITA) 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

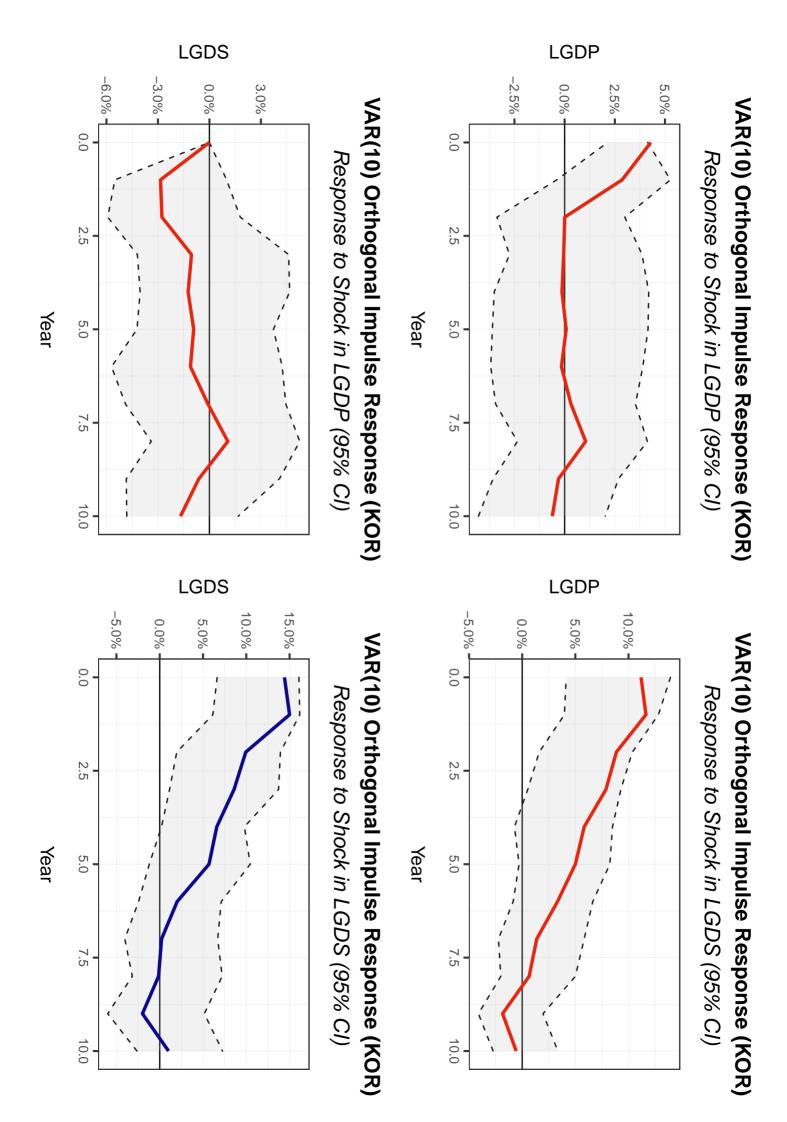
VAR(10) Orthogonal Impulse Response (ITA)

VAR(10) Orthogonal Impulse Response (ITA)

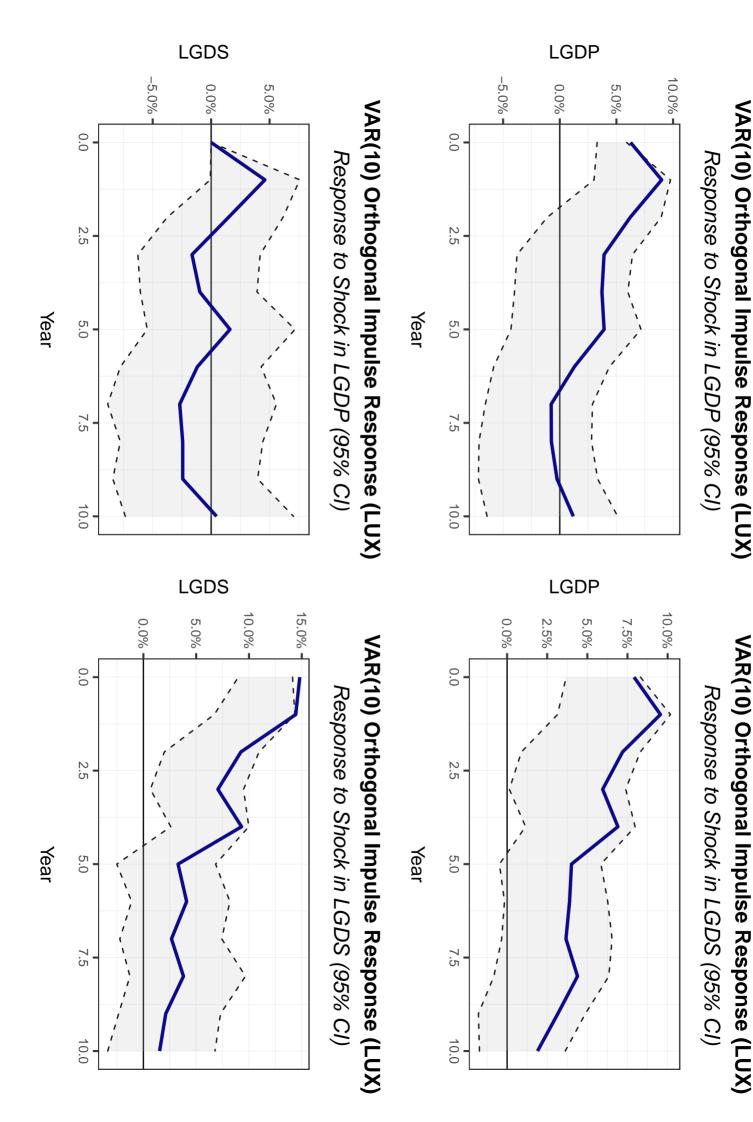
LGDS LGDP -4.0% 4.0% 8.0% 3.0% 6.0% 9.0% 0.0% 0.0% VAR(10) Orthogonal Impulse Response (JPN) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS **LGDP** 10.0% 15.0% 10.0% -0.0% 5.0% 5.0% 0.0% 2.5% 7.5% VAR(10) Orthogonal Impulse Response (JPN) 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

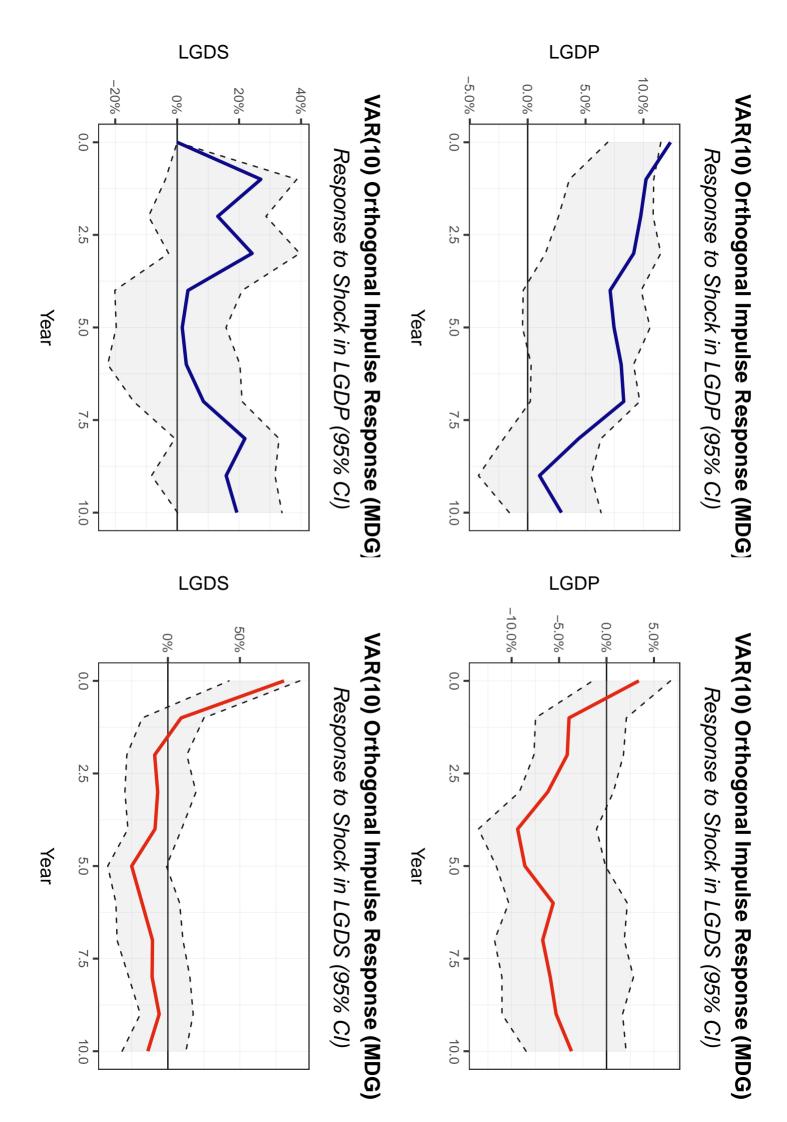
VAR(10) Orthogonal Impulse Response (JPN)

VAR(10) Orthogonal Impulse Response (JPN)



LGDS LGDP -10.0% -20.0% 20.0% -0.0% 10.0% -20% -40% 20% -0% VAR(10) Orthogonal Impulse Response (KWT) VAR(10) Orthogonal Impulse Response (KWT) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP -25% -20% 25% 50% 20% 40% 0% 0% VAR(10) Orthogonal Impulse Response (KWT) VAR(10) Orthogonal Impulse Response (KWT) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0



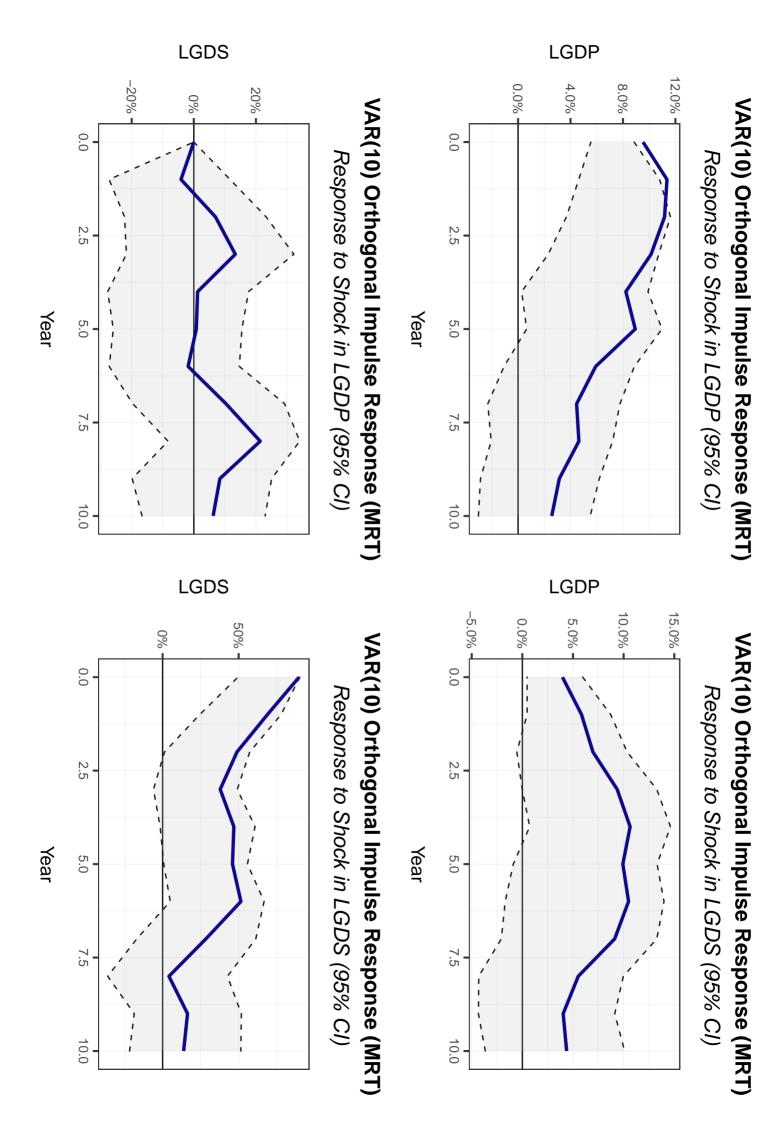


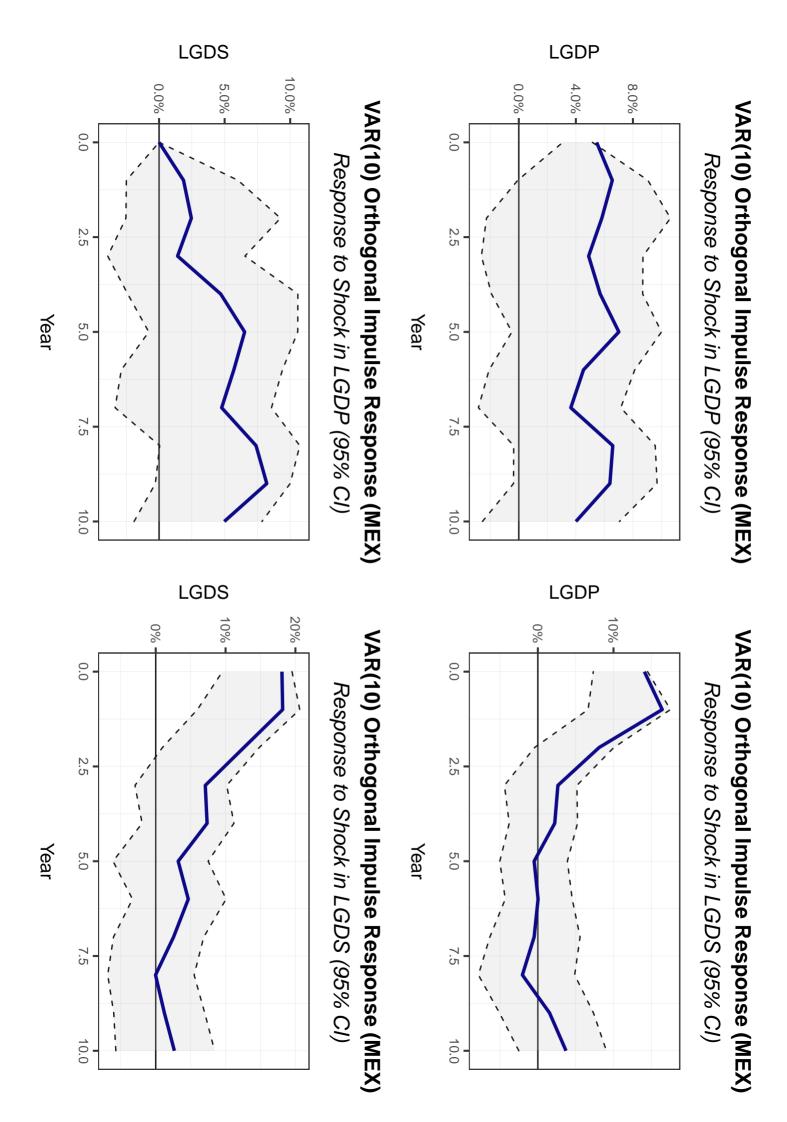
LGDS LGDP 15.0% -10.0% -25% 5.0% 0.0% 25% 50% 0% VAR(10) Orthogonal Impulse Response (MWI) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS **LGDP** -5.0%15.0% 10.0% 100% 0.0% 5.0% 50% 0% VAR(10) Orthogonal Impulse Response (MWI) 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

VAR(10) Orthogonal Impulse Response (MWI)

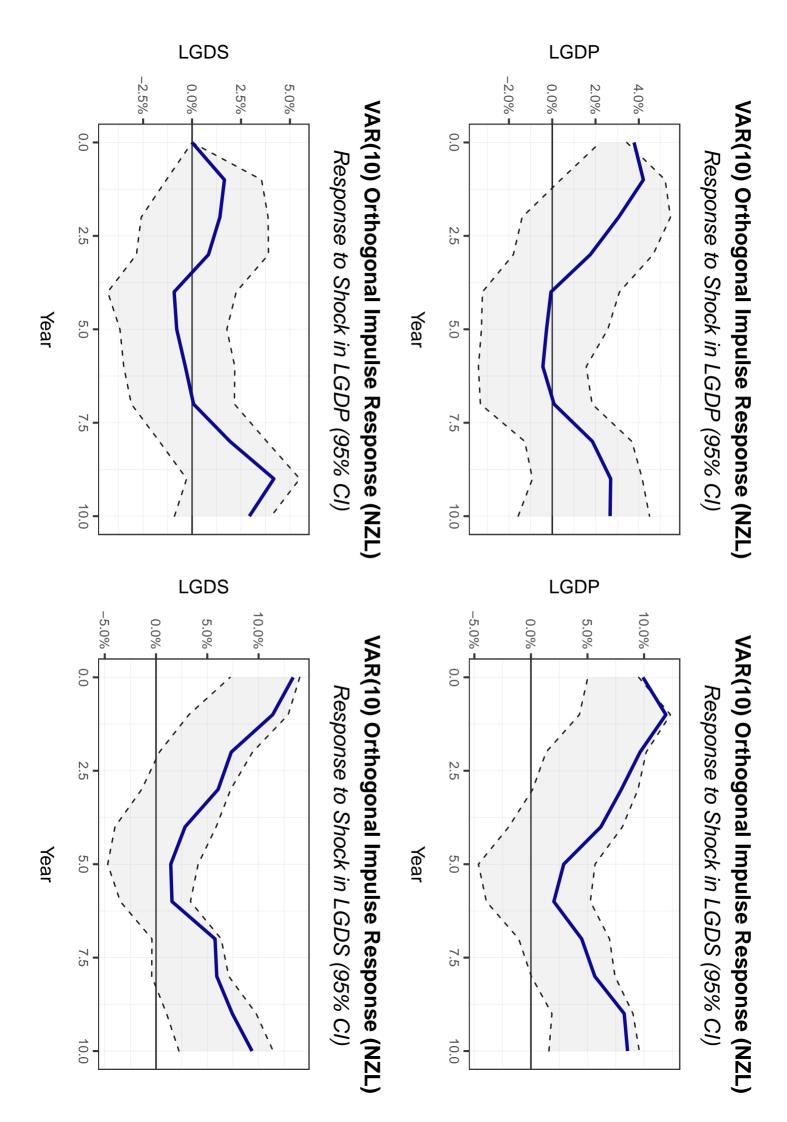
VAR(10) Orthogonal Impulse Response (MWI)

LGDS LGDP 12.0% --10% 0.0% 4.0% 8.0% 10% 20% -0% VAR(10) Orthogonal Impulse Response (MLT) VAR(10) Orthogonal Impulse Response (MLT) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS **LGDP** -5.0% 15.0% 10.0% -20% 5.0% 0.0% 20% 40% 0% VAR(10) Orthogonal Impulse Response (MLT) VAR(10) Orthogonal Impulse Response (MLT) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

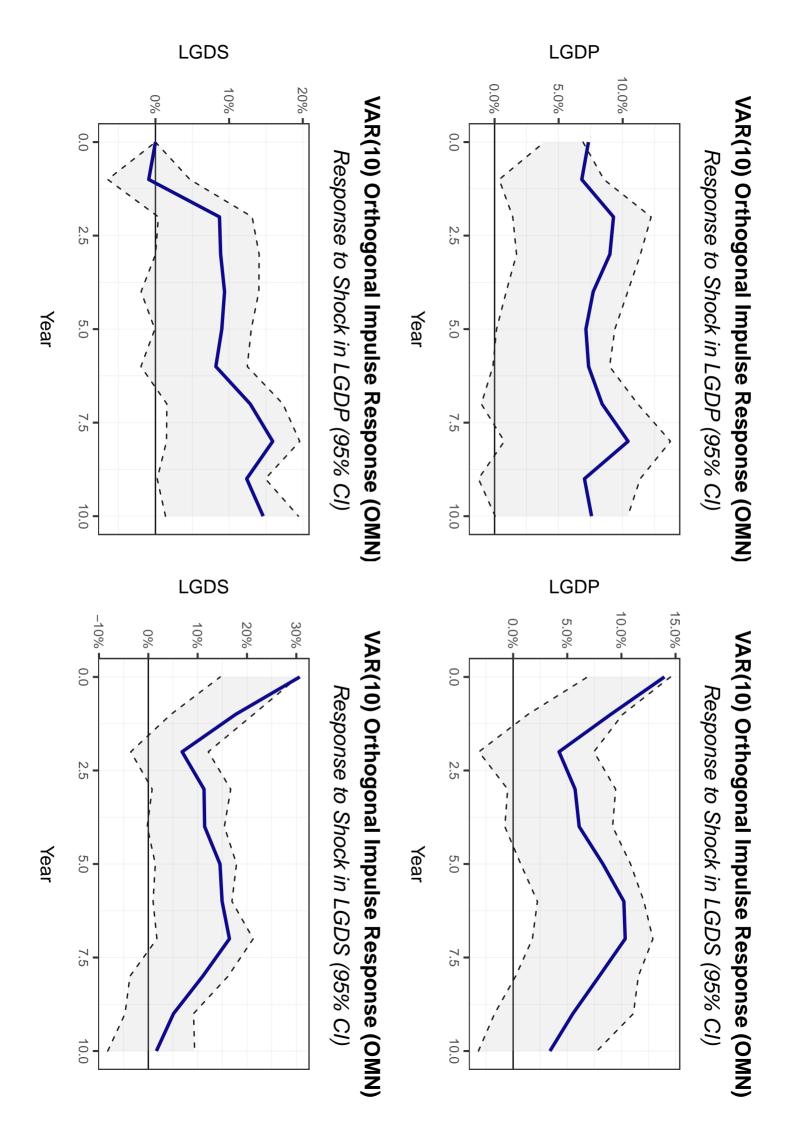


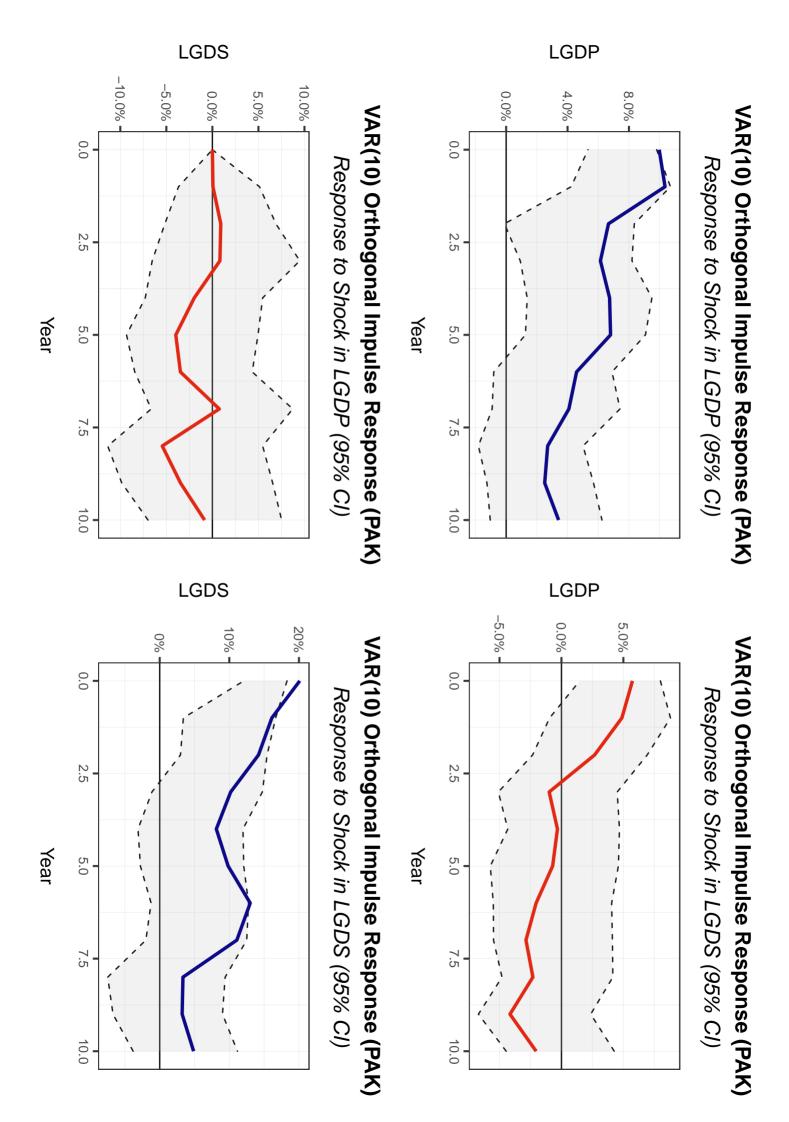


LGDS LGDP -5.0% --5.0% 0.0% 5.0% -5.0% 0.0% VAR(10) Orthogonal Impulse Response (NLD) VAR(10) Orthogonal Impulse Response (NLD) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 10.0% -10.0% -0.0% 5.0% 2.5% 5.0% 7.5% 0.0% VAR(10) Orthogonal Impulse Response (NLD) VAR(10) Orthogonal Impulse Response (NLD) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0



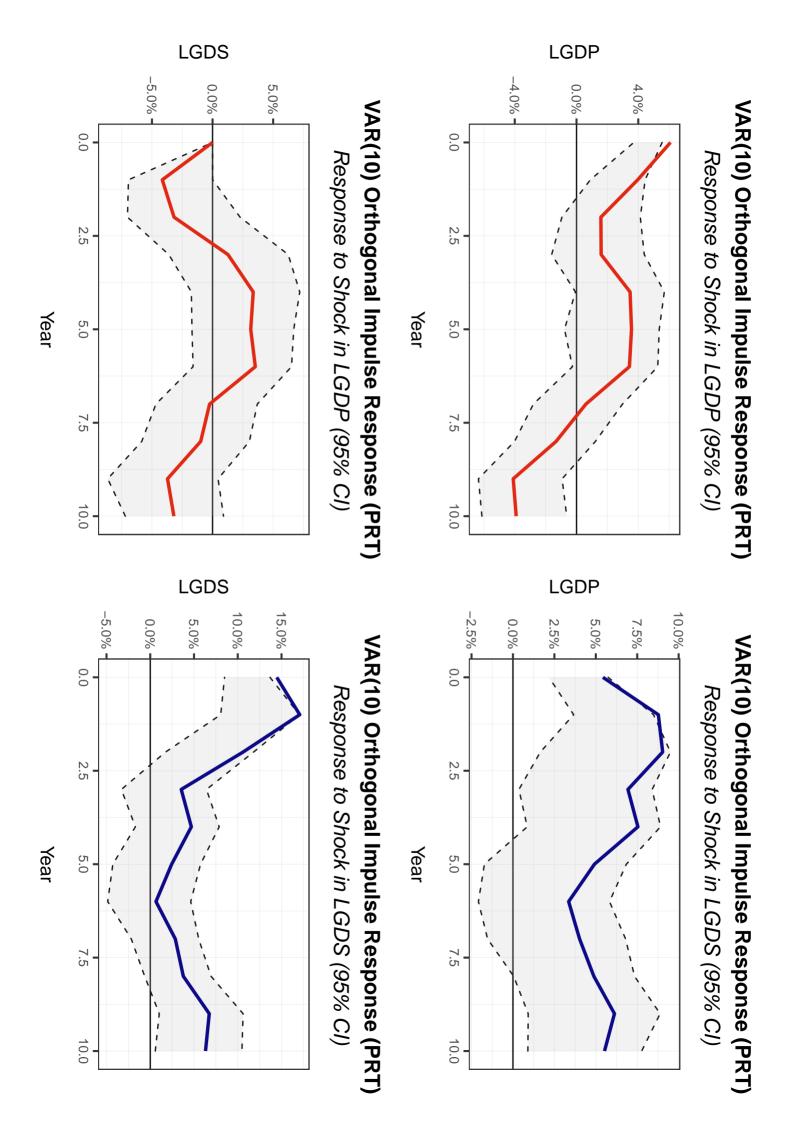
LGDS LGDP -5.0%10.0% --4.0%5.0% 0.0% 0.0% 4.0% -8.0% -VAR(10) Orthogonal Impulse Response (NOR) VAR(10) Orthogonal Impulse Response (NOR) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS **LGDP** 15.0% 10.0% -5.0% 10.0% -5.0% 5.0% 5.0% 0.0% 0.0% VAR(10) Orthogonal Impulse Response (NOR) VAR(10) Orthogonal Impulse Response (NOR) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

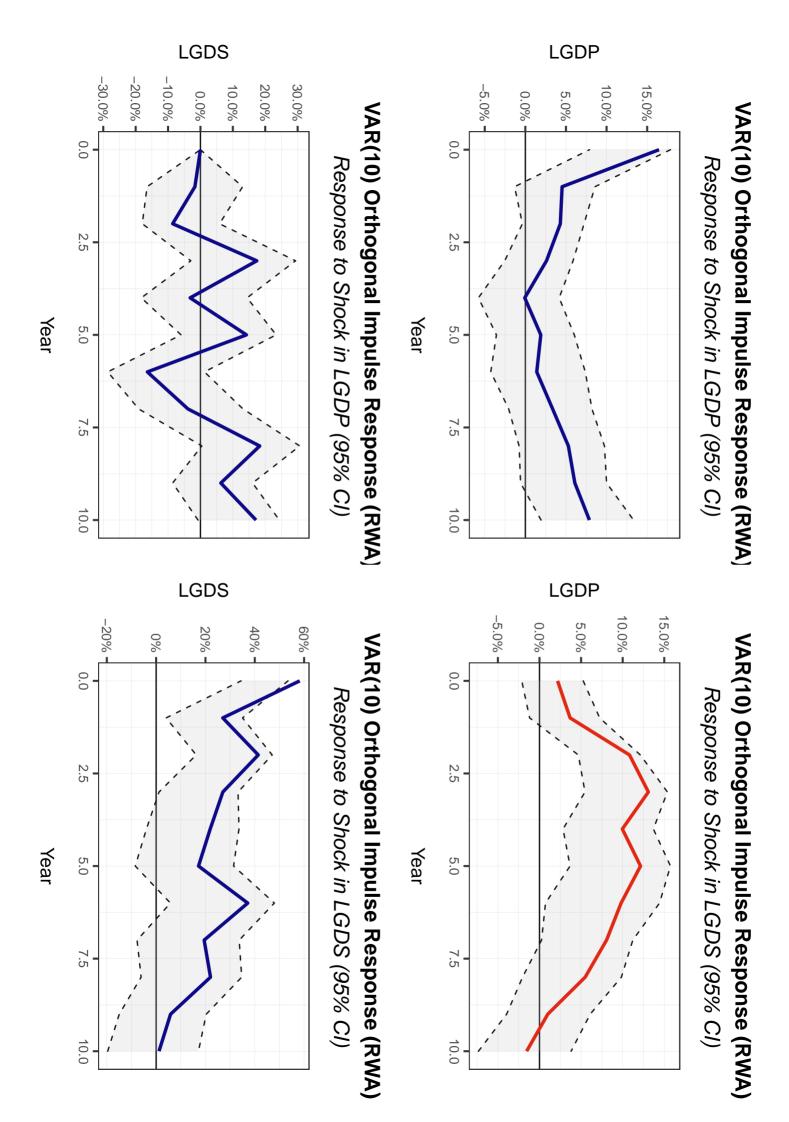


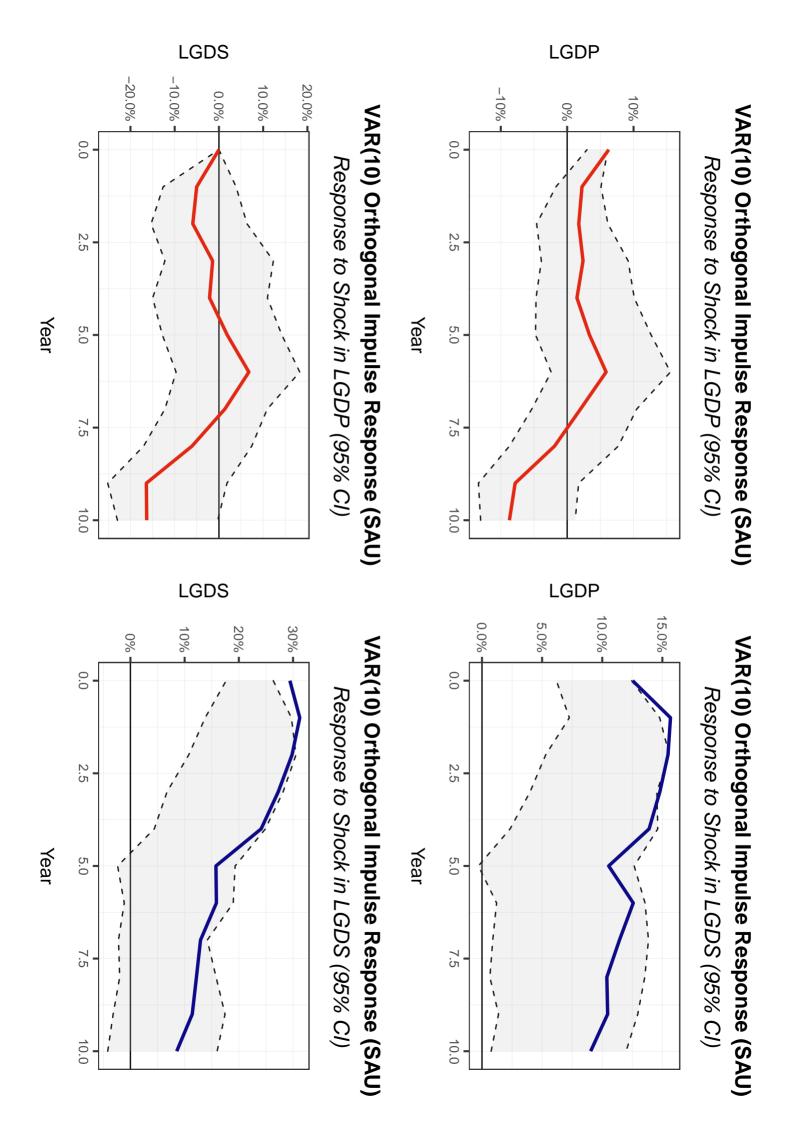


LGDS LGDP 10.0% --5.0% 20.0% -15.0% -10% 5.0% 0.0% 10% 20% -0% VAR(10) Orthogonal Impulse Response (PNG) VAR(10) Orthogonal Impulse Response (PNG) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 20.0% 10.0% 15.0% -10% 0.0% 5.0% 10% 20% 30% -0% VAR(10) Orthogonal Impulse Response (PNG) VAR(10) Orthogonal Impulse Response (PNG) 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

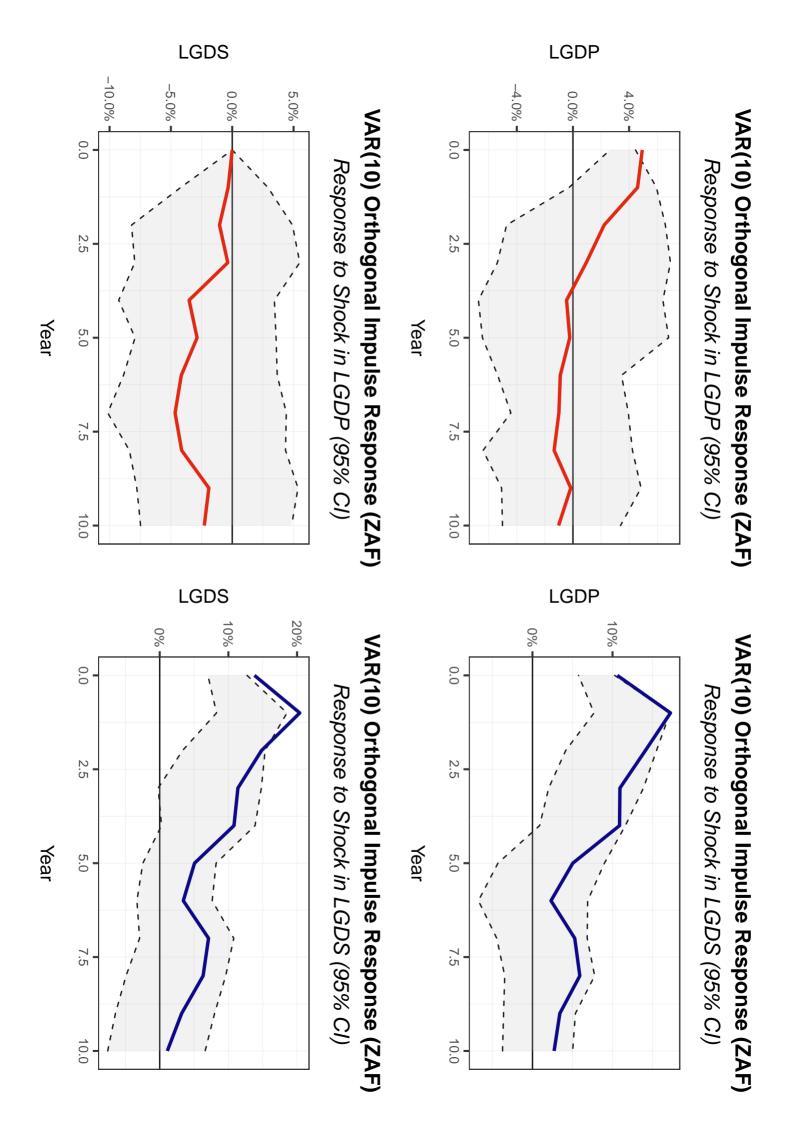
LGDS LGDP 10.0% 15.0% -5.0% -0.0% 10% 0% VAR(10) Orthogonal Impulse Response (PER) VAR(10) Orthogonal Impulse Response (PER) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP -5.0% 10.0% 15.0% 0.0% 5.0% 10% 20% -0% VAR(10) Orthogonal Impulse Response (PER) VAR(10) Orthogonal Impulse Response (PER) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0







LGDS **LGDP** 10.0% --2.0%-5.0%5.0% 0.0% 0.0% 2.0% 6.0% -4.0% VAR(10) Orthogonal Impulse Response (SGP) VAR(10) Orthogonal Impulse Response (SGP) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP -5.0% 10.0% -0.0% 5.0% 4.0% -8.0% -0.0% VAR(10) Orthogonal Impulse Response (SGP) VAR(10) Orthogonal Impulse Response (SGP) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0



LGDS LGDP -5.0% -2.5%-5.0%0.0% 0.0% 5.0% 5.0% -2.5% VAR(10) Orthogonal Impulse Response (ESP) VAR(10) Orthogonal Impulse Response (ESP) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 10.0% -5.0% 15.0% -5.0%10.0% 5.0% 5.0% 0.0% 0.0% VAR(10) Orthogonal Impulse Response (ESP) VAR(10) Orthogonal Impulse Response (ESP) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS LGDP -5.0%-4.0%0.0% 0.0% 5.0% 4.0% -VAR(10) Orthogonal Impulse Response (SWE) VAR(10) Orthogonal Impulse Response (SWE) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 10.0% -12.0% --4.0%5.0% 4.0% 8.0% 0.0% 0.0% VAR(10) Orthogonal Impulse Response (SWE) VAR(10) Orthogonal Impulse Response (SWE) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS **LGDP** -2.5%-5.0% -5.0% 0.0% 0.0% 5.0% -2.5% 5.0% VAR(10) Orthogonal Impulse Response (CHE) VAR(10) Orthogonal Impulse Response (CHE) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS **LGDP** 4.0% 0.0% 8.0% 0.0% 5.0% 2.5% 7.5% VAR(10) Orthogonal Impulse Response (CHE) VAR(10) Orthogonal Impulse Response (CHE) 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS LGDP -5.0% 10.0% -5.0% 0.0% 4.0% 0.0% 2.0% 6.0% 8.0% -VAR(10) Orthogonal Impulse Response (THA) VAR(10) Orthogonal Impulse Response (THA) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP 15.0% -10.0% --5.0%10.0% -5.0%5.0% 0.0% 5.0% 0.0% VAR(10) Orthogonal Impulse Response (THA) VAR(10) Orthogonal Impulse Response (THA) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS LGDP 10.0% --20% -5.0% 0.0% 20% -0% VAR(10) Orthogonal Impulse Response (TGO) VAR(10) Orthogonal Impulse Response (TGO) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP -5.0% 10.0% 15.0% --25% 5.0% 0.0% 25% 50% 75% 0% VAR(10) Orthogonal Impulse Response (TGO) VAR(10) Orthogonal Impulse Response (TGO) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS LGDP -5.0%15.0% -10.0% 15.0% 10.0% 5.0% 0.0% 0.0% 5.0% VAR(10) Orthogonal Impulse Response (TUR) 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP -10% 10% 20% 10% 0% 0% VAR(10) Orthogonal Impulse Response (TUR) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

VAR(10) Orthogonal Impulse Response (TUR)

VAR(10) Orthogonal Impulse Response (TUR)

LGDS LGDP -4.0%6.0% -0.0% 4.0% 8.0% 0.0% 2.0% 4.0% VAR(10) Orthogonal Impulse Response (GBR) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP -5.0%15.0% -10.0% 5.0% 5.0% 0.0% 0.0% VAR(10) Orthogonal Impulse Response (GBR) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

VAR(10) Orthogonal Impulse Response (GBR)

VAR(10) Orthogonal Impulse Response (GBR)

LGDS LGDP -2.00% -1.00%-1.00%-3.00%0.00% -2.00%0.00% 3.00% -2.00% 1.00% 1.00% VAR(10) Orthogonal Impulse Response (USA) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 **LGDS LGDP** 0.0% 2.0% 4.0% 2.0% 3.0% 6.0% 0.0% 1.0% VAR(10) Orthogonal Impulse Response (USA) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

VAR(10) Orthogonal Impulse Response (USA)

VAR(10) Orthogonal Impulse Response (USA)

LGDS **LGDP** -10.0% -20.0% 20.0% 10.0% -5.0%10.0% 15.0% 0.0% 5.0% 0.0% VAR(10) Orthogonal Impulse Response (URY) VAR(10) Orthogonal Impulse Response (URY) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDP **LGDS** -20% -10% 20% 40% 20% 10% 0% 0% VAR(10) Orthogonal Impulse Response (URY) VAR(10) Orthogonal Impulse Response (URY) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS **LGDP** -10% -10% 10% 0% 0% VAR(10) Orthogonal Impulse Response (VEN) VAR(10) Orthogonal Impulse Response (VEN) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS **LGDP** 10.0% 15.0% -10% 0.0% 5.0% 10% 20% 30% -0% VAR(10) Orthogonal Impulse Response (VEN) VAR(10) Orthogonal Impulse Response (VEN) 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0

LGDS LGDP 10.0% 15.0% --20% 5.0% 0.0% -40% 20% 40% -0% VAR(10) Orthogonal Impulse Response (ZWE) VAR(10) Orthogonal Impulse Response (ZWE) 0.0 0.0 Response to Shock in LGDP (95% CI) Response to Shock in LGDP (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0 LGDS LGDP -10% -40% 40% 80% 10% 0% 0% VAR(10) Orthogonal Impulse Response (ZWE) VAR(10) Orthogonal Impulse Response (ZWE) 0.0 0.0 Response to Shock in LGDS (95% CI) Response to Shock in LGDS (95% CI) 2.5 2.5 Year Year 5.0 5.0 7.5 7.5 10.0 10.0