

# The 'Tourism Knot' Hypothesis

## Tourism Income and Economic Development

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**CruiseT Workshop**

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Cruise Research Society

# Alexander the Great... Untying the Gordian knot!

Midas = Symbol of Riches?!



- At one time the Phrygians were without a king.
- Oracle decreed that the next man to enter the city driving an ox-cart should become their king.
- Farmer Gordias drove into town on an ox-cart and became king.
- His son **Midas** dedicated the ox-cart to the Gods and tied it to a post with an intricate knot.
- Alexander the Great tried to untie it and became frustrated... So he drew his sword and cut it!

**A Gordian knot is impossible to untie because it has no visible end and no visible beginning**

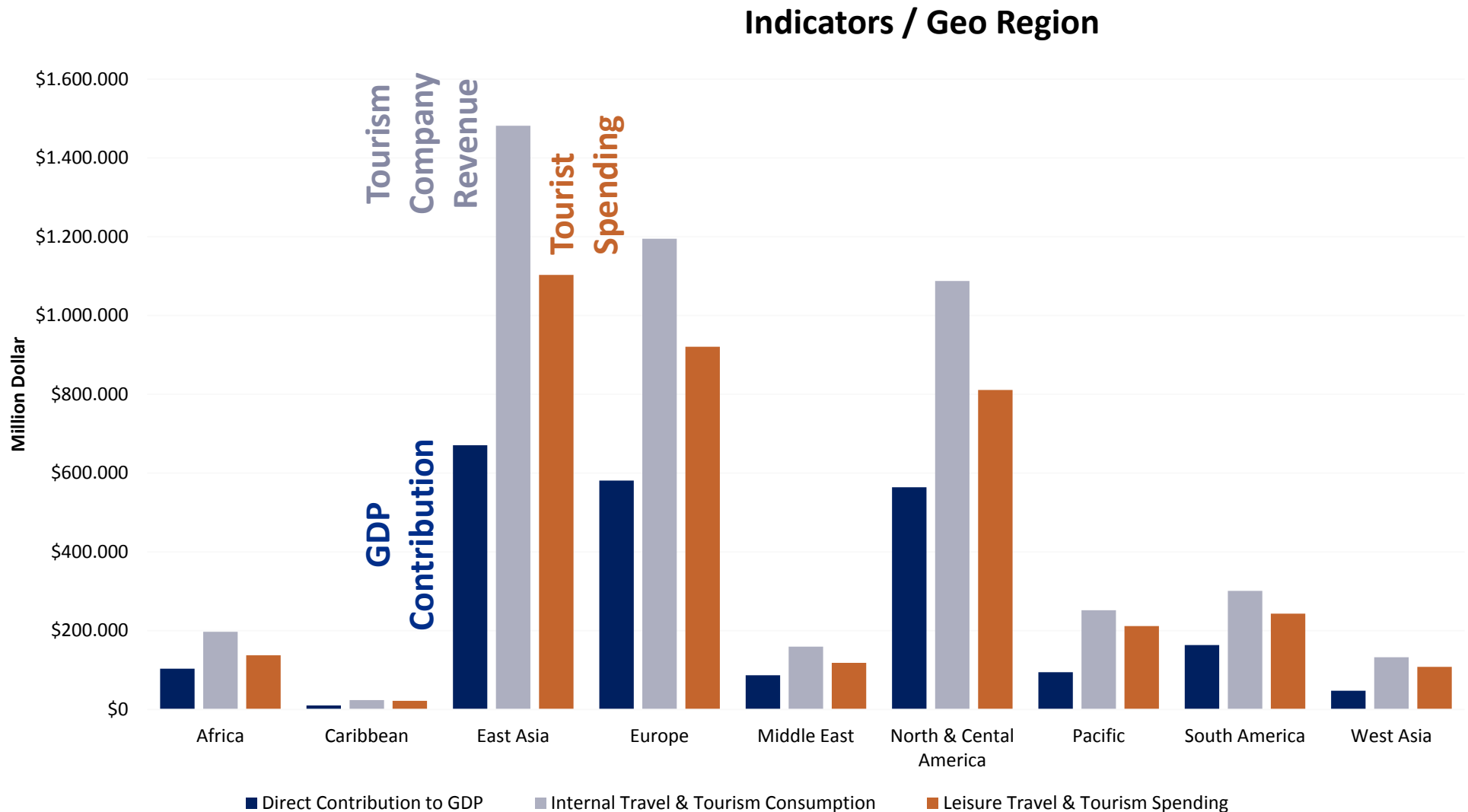
The background of the slide is a grayscale photograph of ocean waves. The waves are breaking, creating white foam and spray. The image is slightly blurred, giving it a sense of motion. A dark blue horizontal band runs across the middle of the image, containing the title and subtitle text.

# **ECONOMIC CONTRIBUTION OF TOURISM**

*World Travel & Tourism Council*

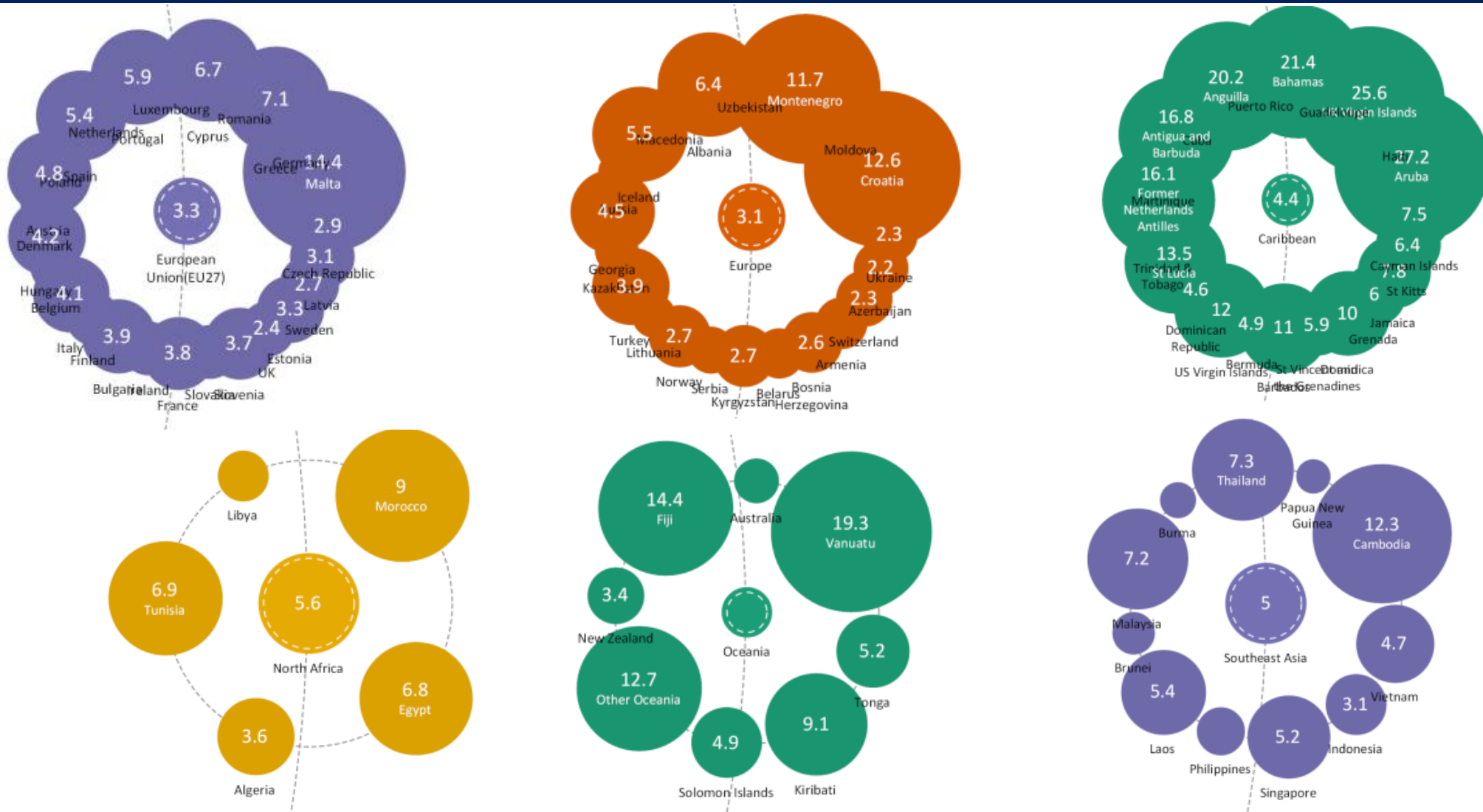
# Direct Tourism Contribution to World GDP = 2.3 Trillion Dollar

*Approx. 3% of Worldwide GDP (9.5% if we include indirect and induced effects)*



# Travel & Tourism Contribution to GDP (% Share)

## According the Geographical Region



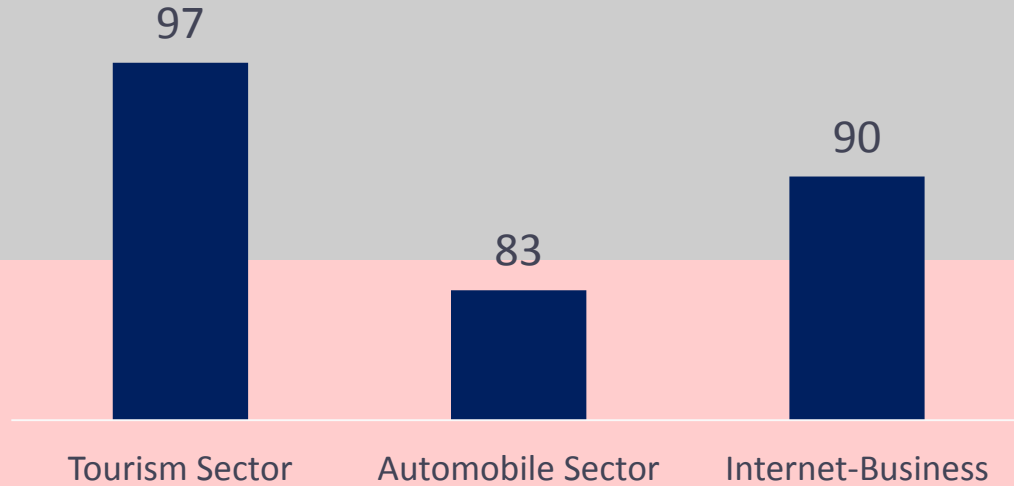
# Question of the Day:

Which business sector is more important for the German Economy? Tourism-, Automobile-, or Internet-Sector?

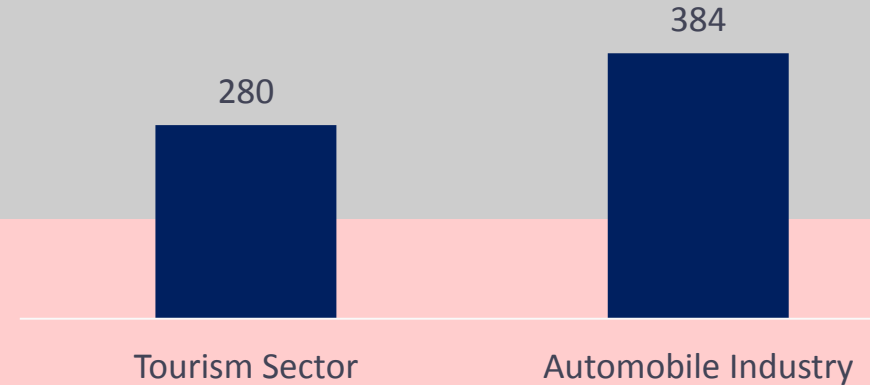
# German Tourism in Numbers 2012

## *Gross-Value-Added, Revenues & Employment*

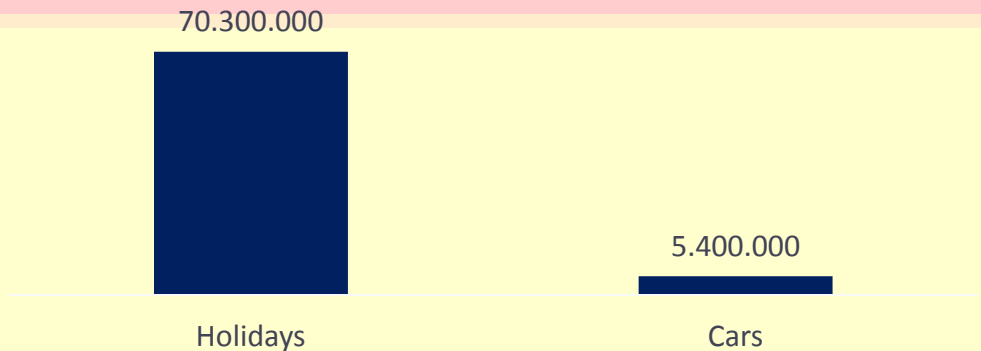
Gross-Value-Added (Bn EURO)



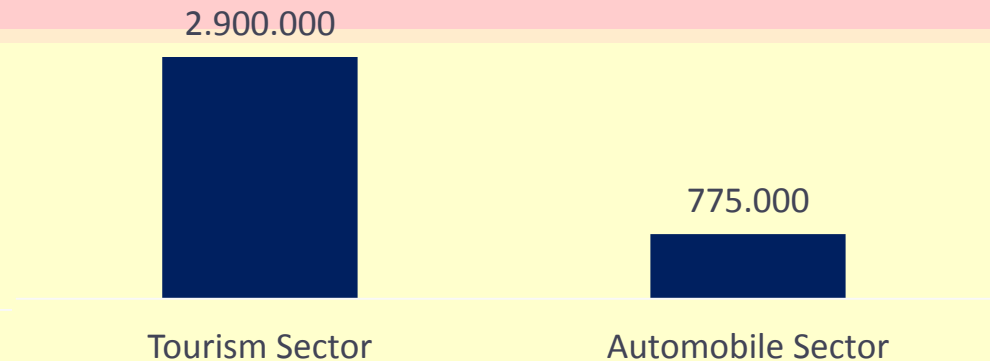
Revenues (Bn EURO)



Unit Production



Jobs



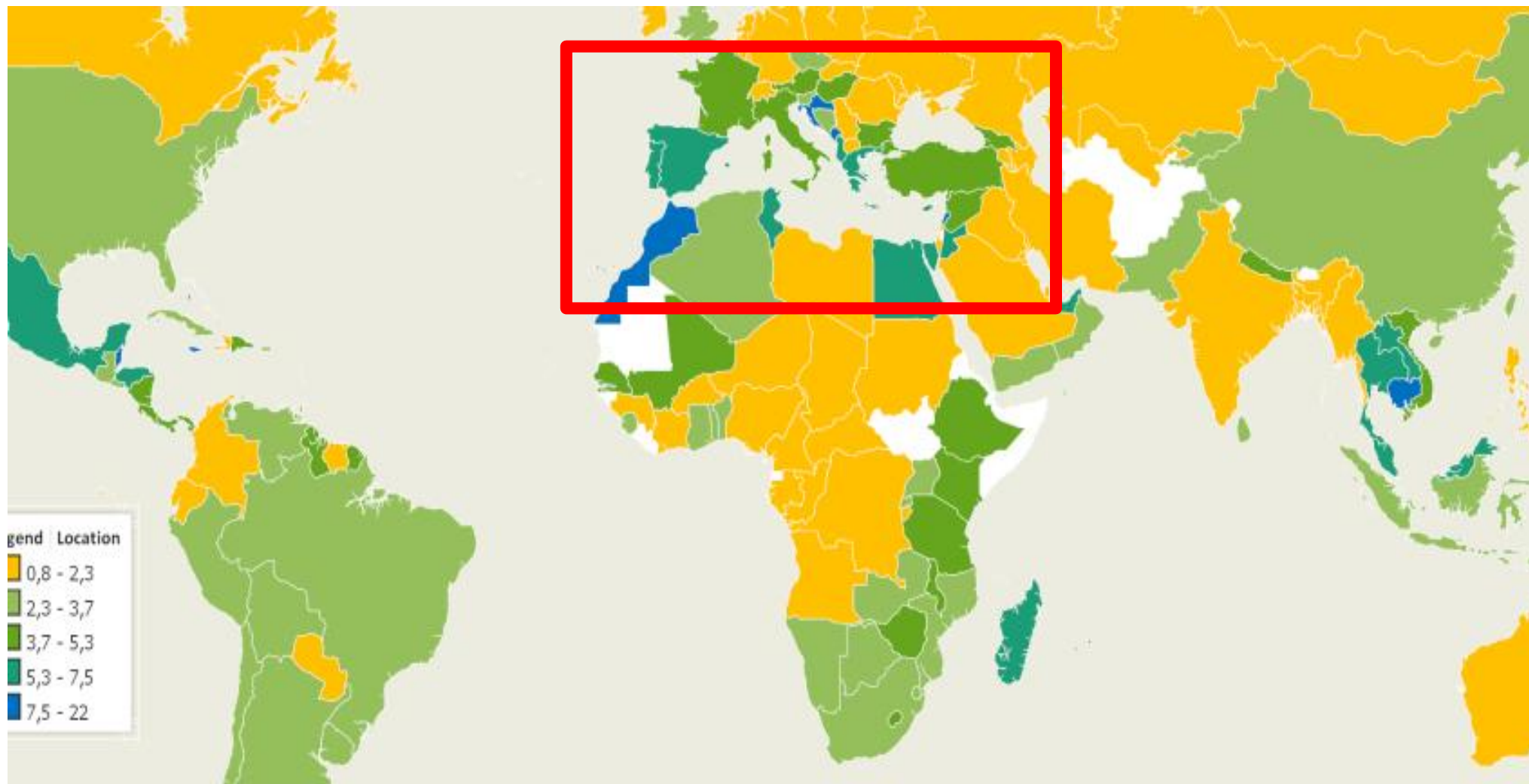
Tourism represents a significant part of the **World's GDP**. Even in countries one would not expect.

The background of the slide is a grayscale photograph of ocean waves. The waves are breaking, creating white foam and spray. The sky is overcast with soft, diffused light. The overall tone is somewhat somber and dramatic.

# DESTINATIONS VS. SOURCE MARKETS

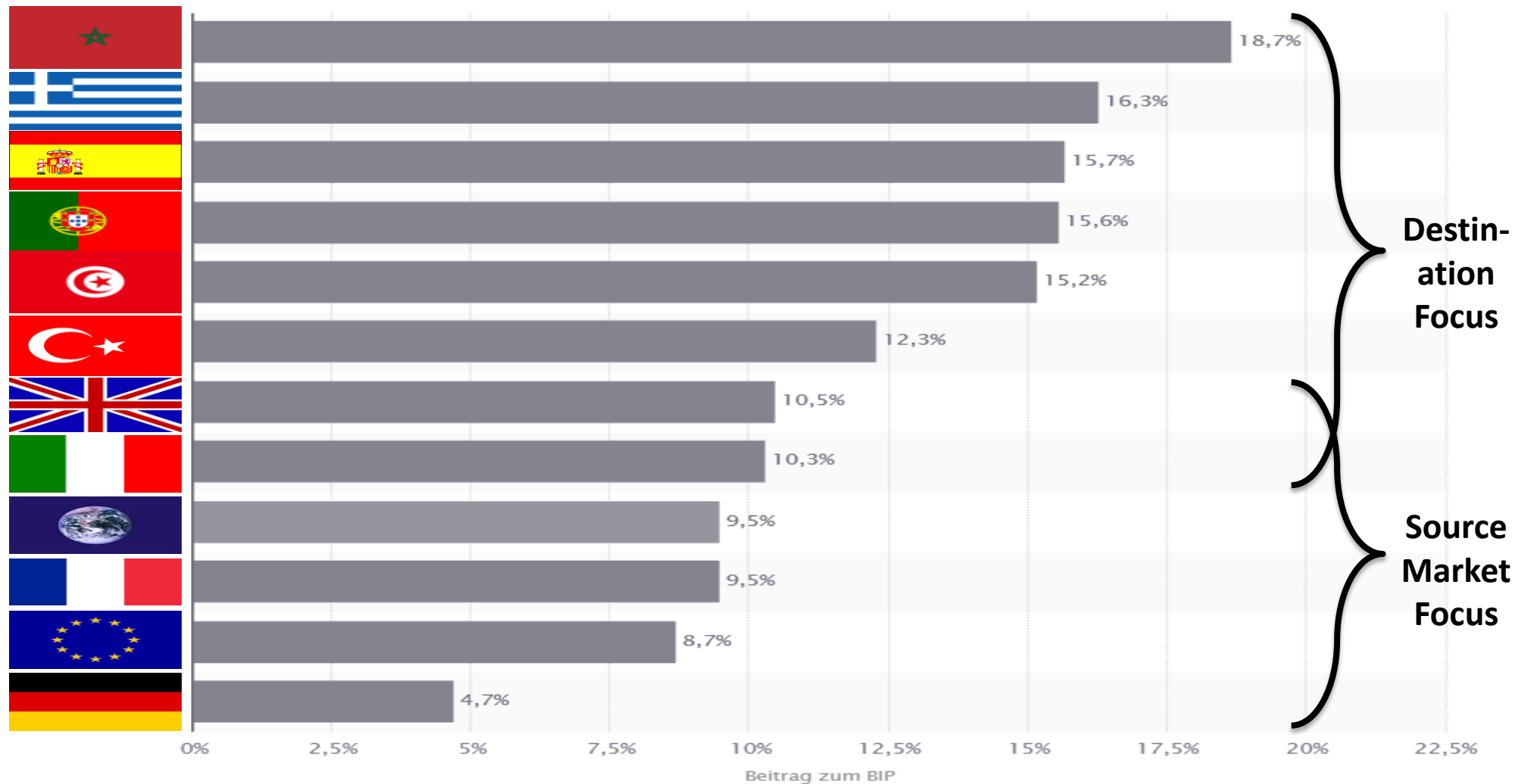
*Who needs tourism more? And who earns more from it?*

# Travel & Tourism Contribution to Direct GDP Contribution (% Share) - World Map



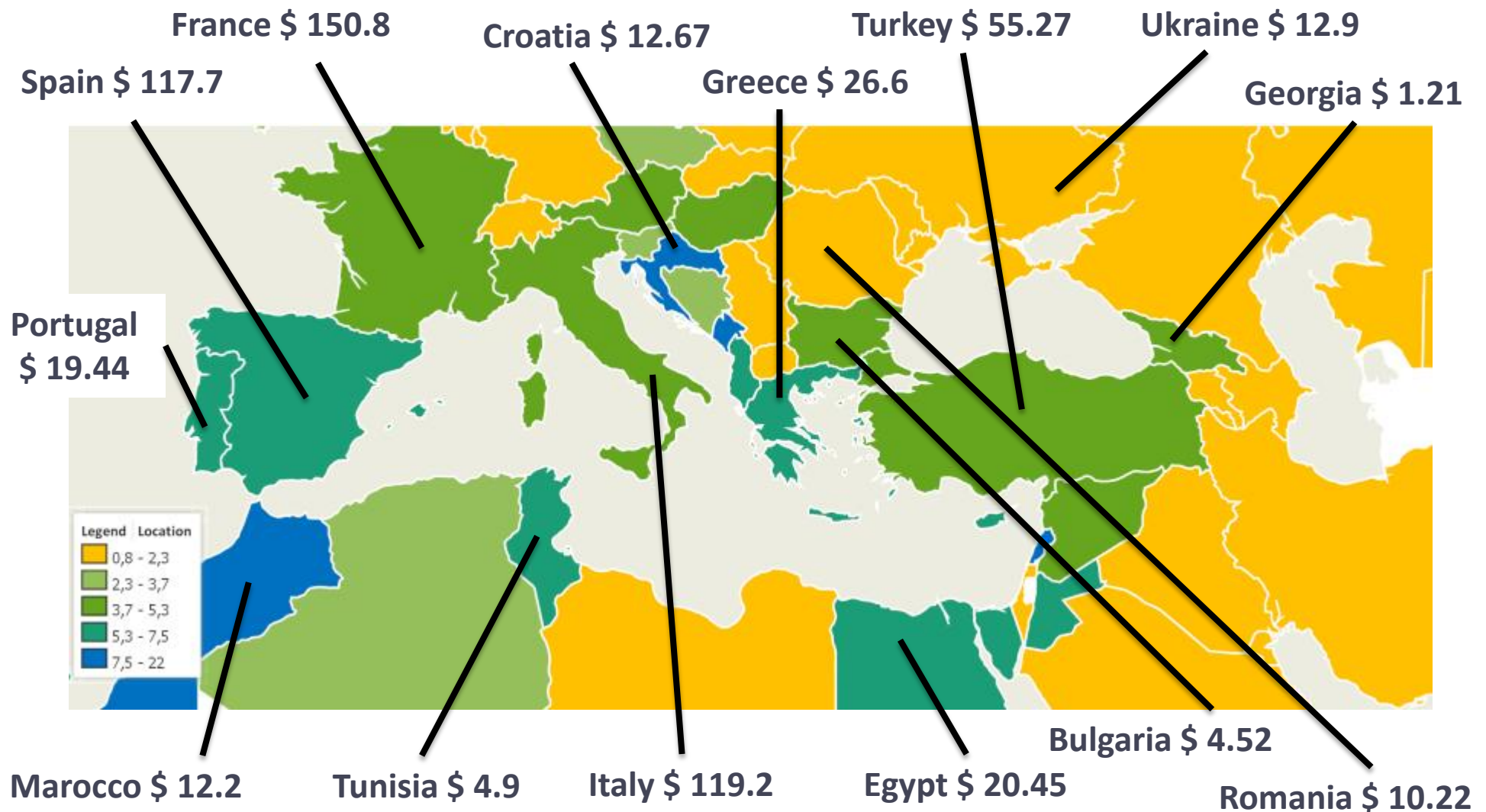
# Total Tourism GDP Contribution 2014 (Direct, Indirect & Induced)

*Tourism is more important for Destination Countries*

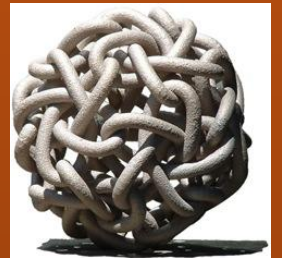


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# Leisure Travel & Tourism Spending (\$ Bn) in Relation to Direct GDP Contribution - South Europe & North Africa



**Question of the Day:** Even  
Though Tourism is a significant  
part of their economies,  
**Destinations** have lower levels  
of Tourism-Spending. How  
come?



# Could it be because of Tourism Sector Structure & Maturity?

## *ANOVA (Factors: Tourism Life Cycle Phase, Mass-Tourism)*

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Mass Tourism	Between Groups	114,999	162	,710	1,852	,140
	Within Groups	3,833	10	,383		
	Total	118,832	172			
Tourism Life Cycle Phase	Between Groups	217,496	162	1,343	2,302	,072
	Within Groups	5,833	10	,583		
	Total	223,329	172			

The degree of mass-tourism and the tourism life cycle phase are not sufficient to explain the differences in tourism spending between countries

# UNDERSTANDING TOURISM SPENDING

*The role of Government Spending & Capital Investment*



# WTTC Indicator Definitions

## Travel & Tourism Direct Contribution to GDP

- GDP generated by industries that deal directly with tourists, including hotels, travel agents, airlines and other passenger transportation services, as well as the activities of restaurant and leisure industries that deal directly with tourists.
- It is equivalent to total internal Travel & Tourism spending within a country minus purchases made by those industries (including imports).

## Domestic Travel & Tourism Spending

- Spending within a country by that country's residents for both business and leisure trips. Multi-use consumer durables are not included since they are not purchased solely for tourism purposes.
- Outbound spending by residents abroad is not included here

## Government Individual Travel & Tourism Spending

- Government spending on individual non-market services for which beneficiaries can be separately identified. These social transfers are directly comparable to consumer spending and, in certain cases, may represent public provision of consumer services.
- For example, it includes provision of national parks and museums.

## Internal Travel & Tourism Consumption (Tourism Revenue)

- Total revenue generated within a country by industries that deal directly with tourists including visitor exports, domestic spending and government individual spending.
- This does not include spending abroad by residents.

## Leisure Travel & Tourism Spending (Tourist Spending)

- Spending on leisure travel within a country by residents and international visitors.

## Capital Investment

- Capital investment spending by all sectors directly involved in the Travel & Tourism industry. This also constitutes investment spending by other industries on specific tourism assets such as new visitor accommodation, passenger transportation equipment, as well as restaurants and leisure facilities for specific tourism use.

# Indicators according to Region (Mill Dollar)

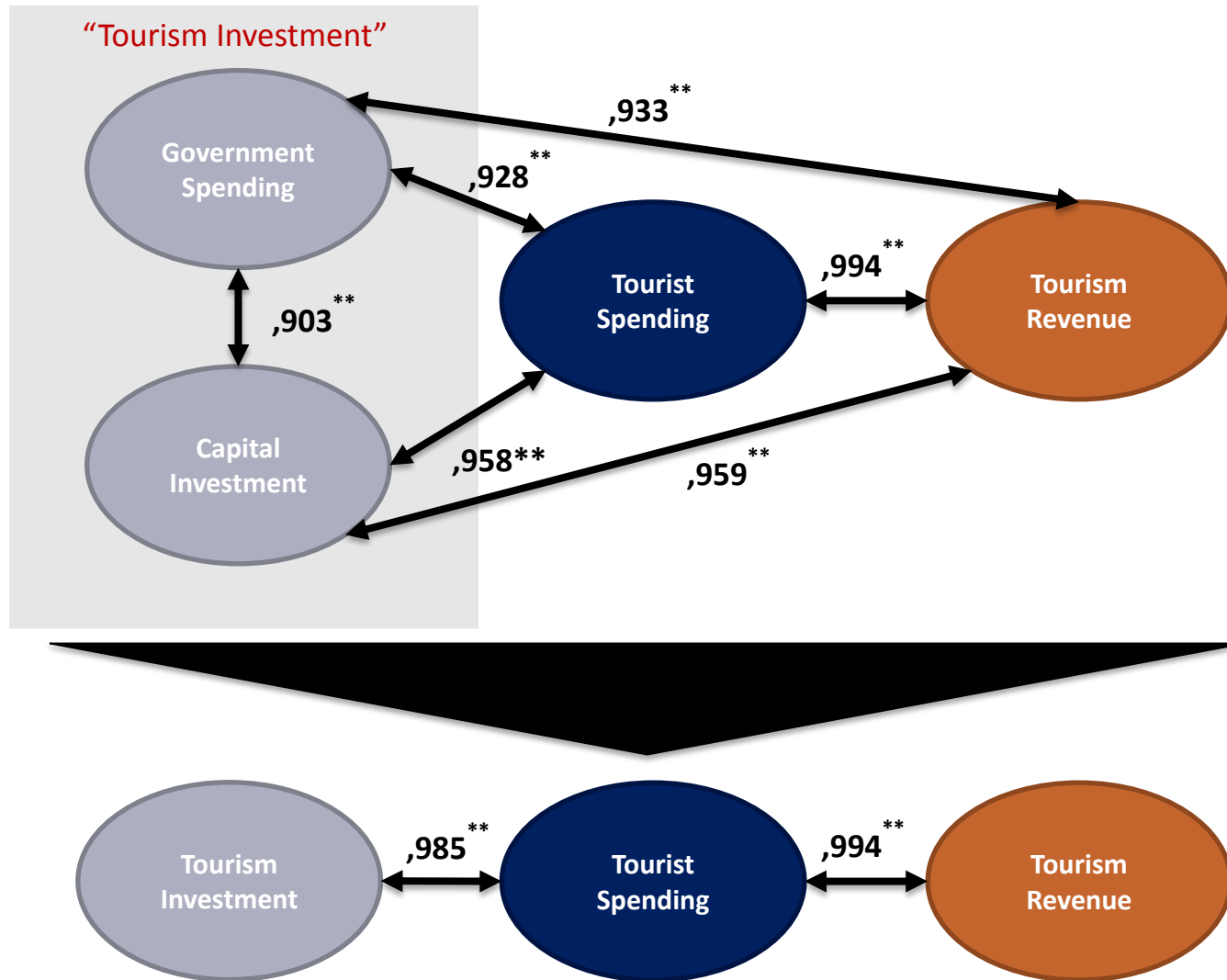
Geographic Region		Direct Contribution to GDP	Domestic Travel & Tourism Spending	Government Individual Travel & Tourism Spending	Internal Travel & Tourism Consumption	Leisure Travel & Tourism Spending	Capital Investment
Africa	N	47	47	47	47	47	47
	Sum	\$103.518	\$116	\$3.081	\$197.143	\$137.417	\$39.833
	Mean	<b>\$2.203</b>	<b>\$2.474</b>	<b>\$66</b>	<b>\$4.195</b>	<b>\$2.924</b>	<b>\$848</b>
	Std. Deviation	\$4.658	\$6.407	\$297	\$10.172	\$6.898	\$2.049
Caribbean	N	13	13	13	13	13	13
	Sum	\$10.197	\$6.497	\$502	\$23.649	\$21.791	\$3.516
	Mean	<b>\$784</b>	<b>\$500</b>	<b>\$39</b>	<b>\$1.819</b>	<b>\$1.676</b>	<b>\$270</b>
	Std. Deviation	\$964	\$735	\$72	\$2.320	\$2.202	\$334
East Asia	N	24	24	24	24	24	24
	Sum	\$670.754	\$1,E+06	\$17.010	\$1,E+06	\$1,E+06	\$293.633
	Mean	<b>\$27.948</b>	<b>\$46.382</b>	<b>\$709</b>	<b>\$61.739</b>	<b>\$45.956</b>	<b>\$12.235</b>
	Std. Deviation	\$60.171	\$126.920	\$1.862	\$141.273,485	\$104.966	\$27.855
Europe	N	38	38	38	38	38	38
	Sum	\$580.980	\$681	\$15.689	\$1,E+06	\$920.768	\$176.745
	Mean	<b>\$15.289</b>	<b>\$17.915</b>	<b>\$412</b>	<b>\$31.445</b>	<b>\$24.231</b>	<b>\$4.651</b>
	Std. Deviation	\$24.579	\$32.238	\$666	\$48.290,850	\$37.363	\$7.304
Middle East	N	13	13	13	13	13	13
	Sum	\$86.826	\$71.835	\$1.820	\$159.460	\$118.309	\$48.432
	Mean	<b>\$6.679</b>	<b>\$5.525</b>	<b>\$140</b>	<b>\$12.266</b>	<b>\$9.101</b>	<b>\$3.726</b>
	Std. Deviation	\$7.658	\$5.890	\$153	\$13.024	\$10.211	\$7.244

# Indicators according to Region (Mill Dollar)

Geographic Region		Direct Contribution to GDP	Domestic Travel & Tourism Spending	Government Individual Travel & Tourism Spending	Internal Travel & Tourism Consumption	Leisure Travel & Tourism Spending	Capital Investment
North & Central America	N	2	2	2	2	2	2
	Sum	\$564.086	\$858.154	\$19.236	\$1,E+06	\$810.864	\$199.769
	Mean	<b>\$282.043</b>	<b>\$429.077</b>	<b>\$9.618,00</b>	<b>\$543.730</b>	<b>\$405.432</b>	<b>\$99.884</b>
	Std. Deviation	\$285.667	\$459.680	\$12.287	\$597.998	\$418.872	\$111.015
Pacific	N	8	8	8	8	8	8
	Sum	\$94.377	\$180.930	\$4.923	\$251.735	\$211.611	\$54.170
	Mean	<b>\$11.797,13</b>	<b>\$22.616</b>	<b>\$615</b>	<b>\$31.467</b>	<b>\$26.451</b>	<b>\$6.771</b>
	Std. Deviation	\$20.290	\$39.134	\$1.097	\$53.368	\$44.969	\$11.617
South America	N	19	19	19	19	19	19
	Sum	\$163.283	\$251.970	\$3.215	\$300.925	\$243.270	\$62.237
	Mean	<b>\$8.593</b>	<b>\$13.261</b>	<b>\$169</b>	<b>\$15.838</b>	<b>\$12.803,68</b>	<b>\$3.275,63</b>
	Std. Deviation	\$21.161	\$34.799	\$454	\$37.345	\$32.064	\$7.055
West Asia	N	9	9	9	9	9	9
	Sum	\$47.579	\$92.554	\$1.846	\$132.626	\$107.966	\$18.460
	Mean	<b>\$5.287</b>	<b>\$10.283</b>	<b>\$205</b>	<b>\$14.736</b>	<b>\$11.996</b>	<b>\$2.051</b>
	Std. Deviation	\$11.070,083	\$23.543,281	\$450,277	\$31.313,152	\$25.739	\$4.363
Total	N	173	173	173	173	173	173
	Sum	\$2,E+06	\$3,E+06	\$67.322	\$5,E+06	\$4,E+06	\$896.795
	Mean	<b>\$13.419</b>	<b>\$19.492,06</b>	<b>\$389,14</b>	<b>\$27.917,00</b>	<b>\$21.242,38</b>	<b>\$5.183,79</b>
	Std. Deviation	\$45.751	\$77.569	\$1.612	\$95.408	\$70.595	\$17.964

# Towards a Predictor Model...

## Dealing with Colinearity!

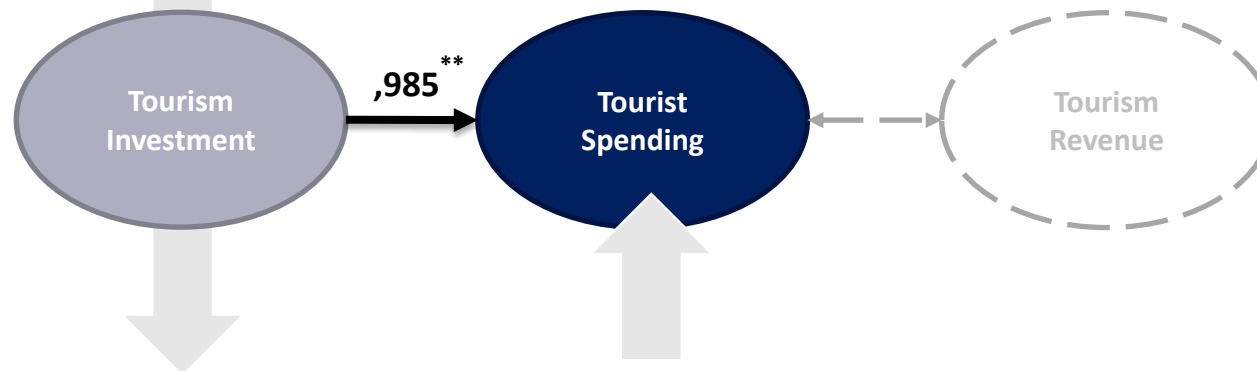


# Towards a Predictor Model...

## Regression Analysis

Coefficients <sup>a</sup>										
Model	Unstandardized Coefficients		Stand. Coefficients	t	Sig.	Correlations			Collinearity Statistics	
	B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	1339,685	961,997	1,393	,166					
	Tourism Investment (Private & Public)	3,571	,048	,985	,000	,985	,985	,985	1,000	1,000

a. Dependent Variable: Leisure Travel & Tourism Spending



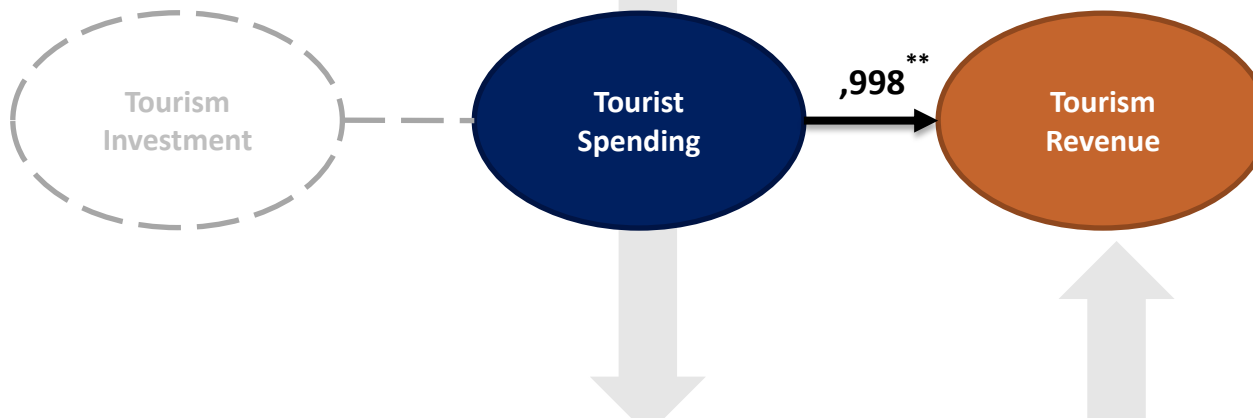
**1 Dollar increase / decrease in tourism investment corresponds to 3.5 increase in tourism spending**

# Towards a Predictor Model...

## Regression Analysis

Coefficients <sup>a</sup>											
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	-734,853	478,144		-1,537	,126					
	Leisure Travel & Tourism Spending	1,349	,007	,998	207,410	,000	,998	,998	,998	1,000	1,000

a. Dependent Variable: Internal Travel & Tourism Consumption



**1 Dollar increase / decrease in tourism spending corresponds to 1.3 increase in tourism revenue**

Tourist's **Spending** is a result  
of Tourism **Investment** and  
generates **Revenues** for  
Tourism Companies!

# Research Literature: Does tourism development promote economic growth?

Ming Che Chou (2013):

- Tourism Spending and Growth in Transition Countries (doi:10.1016/j.econmod.2013.04.024)
- “Empirical studies have shown inconsistent or even contradictory results in terms of a tourism-led economic growth hypothesis” (p.227)
- “One can attribute the neutrality between tourism spending and economic growth to a relatively small contribution of **domestic tourism spending** to overall output.” (p.231)

Mario Holzner (2011):

Beach Disease’ (adaptation of the Dutch Disease Model to Tourism) – De-industrialisation and Economic Contraction (DOI: 10.1016/j.tourman.2010.08.007)

- “The main policy recommendation for countries in development with a potential for tourism specialisation is to **invest apart from tourism specific also into traditional infrastructure**, which can be used both by the tourism sector as well as by the manufacturing sector” (p.929)

María del P. Pablo-Romero & José A. Molina (2013):

- Literature Review on the relationship between economic growth and tourism (DOI:10.1016/j.tmp.2013.05.006)
- The relation between tourism and growth depends on various factors, the main one being the country's **degree of specialisation in tourism**

Christian Steiner (2010):

- Foreign Direct Investment in Tourism (DOI: 10.1002/jtr.788)
- **The influence of political risk and violent political unrest** on tourism FDI is overestimated

Empirical research questions  
the **causality** between  
tourism and economic  
growth...

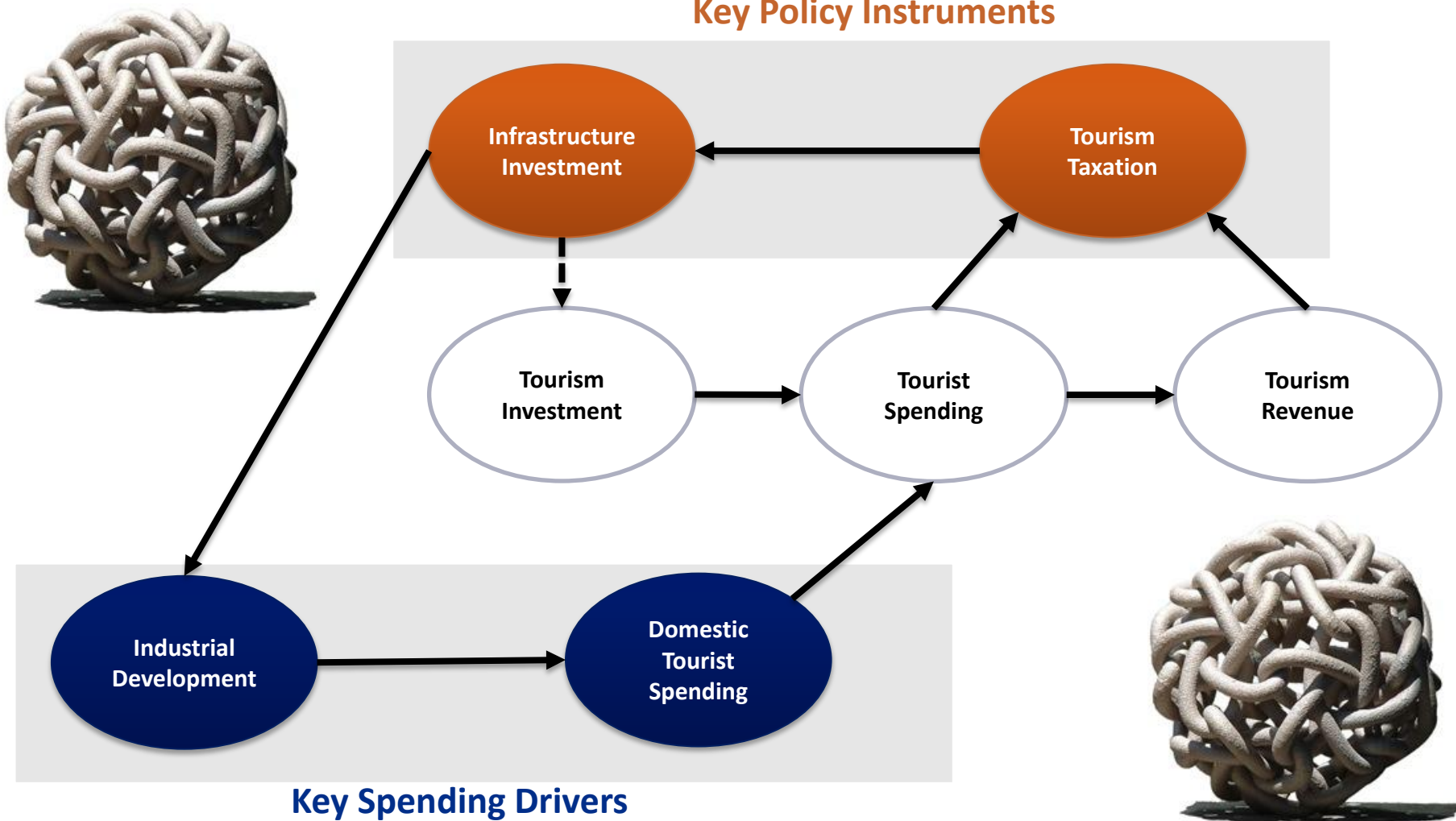
# UNTYING THE KNOT ECONOMIC DEVELOPMENT THROUGH TOURISM

*Tourism as an 'Economic Mono-Culture' Requires Clever  
Investment and Taxation Policies*

# Revisiting our Model...

## *Transition from Destination to Source Market!*

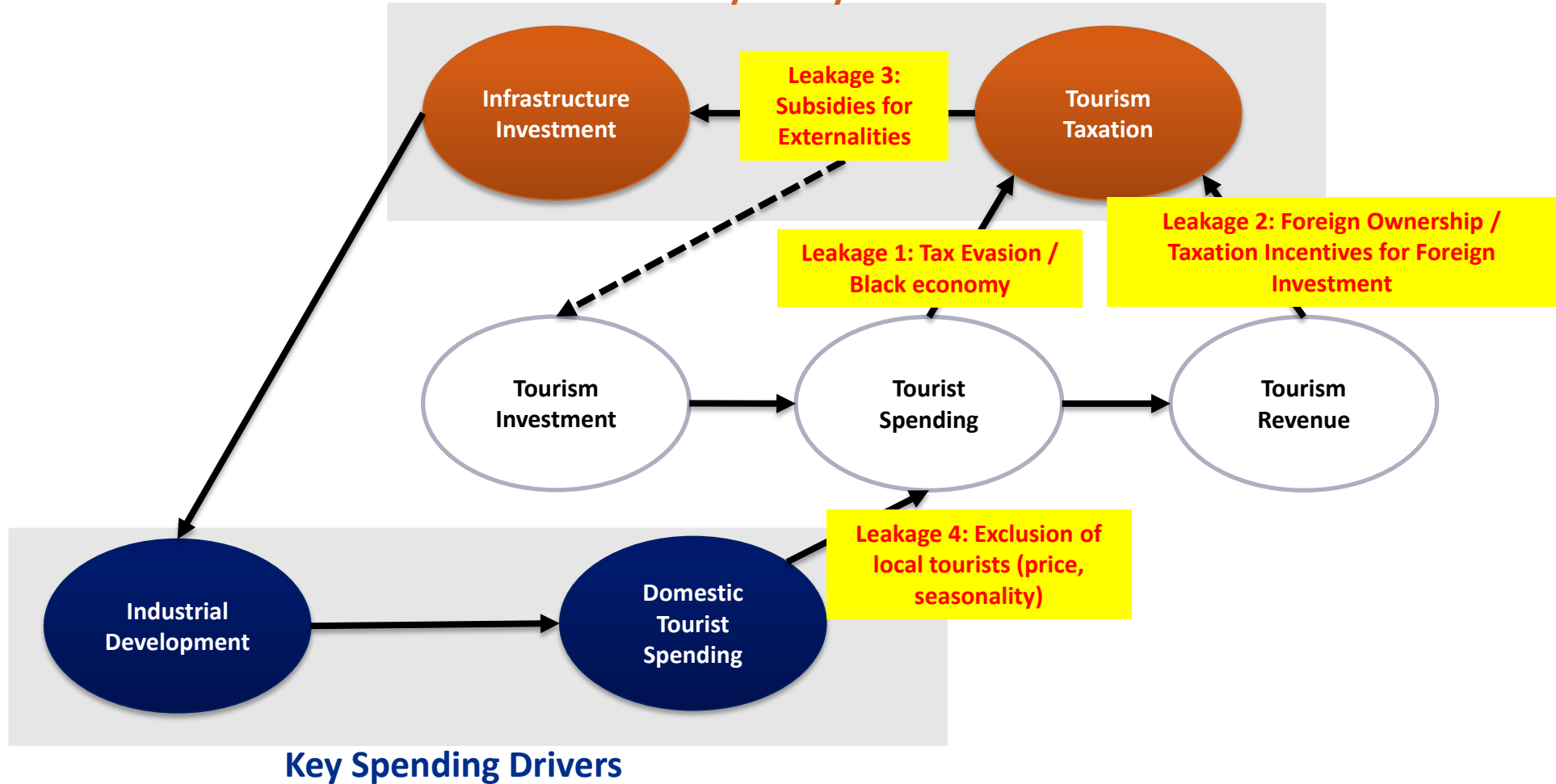
### Key Policy Instruments



# Revisiting our Model...

## *The 'Beach Disease Effect'*

### Key Policy Instruments



# The Banks are closed... But the Beaches are open



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M. Vogel, A. Papathanassis and B. Woibler

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