



The impact of global price volatility on calculating damages in international arbitration *

Summary

*** Please note that this summary of the panel was AI-generated and therefore has not been fully vetted for accuracy.**

The session at Washington Arbitration Week focused on the impact of price volatility in international arbitration, particularly in the context of damages calculations. Dr. Boys Sivani moderated the discussion, highlighting the significance of this topic due to increasing global economic uncertainties affecting various commodities.

Key participants included experts in economics and valuation, such as As Vetter, a senior economist, Tim, a partner with extensive experience in international arbitration, and Sibling Adamson, an energy economist. They provided insights into how price volatility affects legal frameworks and damage assessments in arbitration cases. The discussion emphasized that price fluctuations are not a new phenomenon but have become more observable due to financialization and market dynamics.

Natalia, an associate in arbitration, explained the legal principles governing damage assessments, noting that price volatility can lead to contractual instability and disputes, especially in sectors like energy and commodities. The panelists discussed the valuation date's importance in determining damages, with various approaches taken by tribunals depending on whether the expropriation was lawful or unlawful.

The conversation also touched on practical mechanisms in contracts to address price volatility, such as price review mechanisms and indexation clauses, which can provide flexibility in long-term agreements. The experts acknowledged that while these mechanisms can help mitigate risks, the inherent unpredictability of markets remains a challenge for both investors and legal practitioners.

Overall, the session underscored the complexities of evaluating damages in volatile markets and the need for robust contractual frameworks to navigate these challenges effectively. The panel concluded by inviting questions from the audience, indicating a desire for further engagement on this critical topic.



Authors

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Topics

Global Price Volatility, Impact, Damages, Damages Calculation, International Arbitration

Category

WAW

Full Transcript

00:00:54

or good extra Hello. Anyone,

00:01:11

here we go for the

00:01:13

Nikon. I think even if

00:01:18

you have your audio on

00:01:19

not just the mics is

00:01:21

getting it Up Update. Like

00:01:22

I think I think we're

00:01:24

good. And I didn't the

00:01:31

cinema. That's the old turn

00:01:33

off our phone. And dumb



00:01:37

as I was saying apologies

00:01:40

for those that are attending

00:01:42

in person. There's we have

00:01:44

people that are attending online.

00:01:47

Even from China from Japan

00:01:50

from the names that I

00:01:51

can see and and various

00:01:53

other continent. So it is

00:01:55

with great pleasure that I

00:01:57

introduce. Dr. Boys who sivani

00:02:01

as our moderator on a

00:02:03

topic that that perhaps many

00:02:06

of us have asked ourselves



00:02:08

quite a few times mostly

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in in the in the

00:02:12

last several years. What what

00:02:16

is the impact of of

00:02:18

that phenomenon in in international

00:02:22

arbitration and international arbitration cases?

00:02:25

What is the impact of

00:02:27

price of global volatility in

00:02:34

in Diamond? Calculations and the

00:02:38

effects of those spikes in

00:02:42

prices in in the case

00:02:45

has posed for claimants and

00:02:47

for responding so that that



00:02:50

is a topic that we

00:02:51

have chosen and as you

00:02:53

might know we choose a

00:02:55

topic sometimes from input from

00:02:58

our Advisory board members, but

00:03:02

we'll still choose the topics

00:03:03

from conversations with the stakeholders

00:03:08

investment on International commercial arbitration.

00:03:11

We talked to the experts

00:03:13

in were two boys and

00:03:15

one and on others are

00:03:18

we get the feedback from

00:03:19

the experts but also from



00:03:21

from arbitration attorneys and also

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arbitrators as well as a

00:03:27

as a stakeholders in in

00:03:30

various industry. So this is

00:03:32

one of the topics that

00:03:33

hadn't been addressed before in

00:03:35

Washington arbitration week. I know

00:03:37

that we would like to

00:03:37

bring a number of experts

00:03:40

to address. The topic is

00:03:43

a moderator as I was

00:03:46

indicating. She he is one

00:03:48

of the leading experts in



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Damages from the council to

00:03:52

perspective and the before being

00:03:55

he went to Georgetown University

00:03:59

Law Center and I happen

00:04:03

to be also a fellow

00:04:05

student of his because we

00:04:09

we completed the sat with

00:04:10

the same supervisor. So we've

00:04:12

come a long way and

00:04:13

and I think of no

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other the best person to

00:04:17

moderate this I know because

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of his knowledge and damages



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but he's his knowledge on

00:04:23

the connection between the investment

00:04:25

arbitration field as Council and

00:04:27

the damages so weird that

00:04:28

abortion. Thank you and that

00:04:30

you have a sore. Generous

00:04:37

pay introduction. Hello everyone. I'm

00:04:40

delighted to be here today.

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And as was explained the

00:04:46

topic is a very interesting

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price volatility my personal experience

00:04:53

with that topic is being

00:04:56

involved in some very large



00:04:57

old old old fastest route

00:05:01

to wear their determination of

00:05:03

the price was a very

00:05:06

important that the center of

00:05:08

the chest open price volatility

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is just doesn't come in

00:05:12

the context of oil and

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gas disputed every kind of

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dispute involving some Commodities beer

00:05:18

prices go up and down

00:05:19

at some level this matter

00:05:22

making to be important and

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it today I'll goal is



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to explore some of the

00:05:29

legal aspects of a price

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for like to see how

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it can be kind of

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control over how an international

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arbitration. It comes up and

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also explore a how to

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valuation experts control it and

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put a value on it

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how they can use it

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to run the valuations and

00:05:49

for that we have a

00:05:50

very distinguished and we are



00:05:52

honored to be with them

00:05:55

and introduce them to you

00:05:56

to my left is as

00:05:58

Vetter in the front. She's

00:06:01

a senior Economist with Cornerstone

00:06:03

research in New York is

00:06:05

specializes in financial analysis valuation

00:06:08

and damage assessment. She actually

00:06:10

working multiple investor-state and Commercial

00:06:15

arbitration Consulting on issues related

00:06:18

to economic feasibility market conditions

00:06:21

Quantum of Damages in the

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variety of contexts. She hasn't



00:06:25

worked on the Commodities energy

00:06:27

mining consumer and media cases

00:06:29

prior to becoming a testifying

00:06:32

expert. That's what they spent

00:06:34

two decades as a portfolio

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manager. Your coochie and understand

00:06:38

fixed income and derivatives Trader

00:06:40

are the leading asset manager

00:06:42

and Global investment Banks next

00:06:45

to expect on her on

00:06:47

her last part is a

00:06:49

partner with HK in Washington

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d.c. Israel recognized expert in



00:06:55
valuation and damages in international

00:06:57
arbitration. Tim has served as

00:07:00
a suspect in over 65

00:07:01
International arbitration including more than

00:07:04
45 investor-state cases. His experience

00:07:08
includes numerous Mining and energy

00:07:11
dispute as well. As numerous

00:07:13
cases involving basic Metals team

00:07:16
is the co-author of a

00:07:17
comprehensive study of Damages investor-state

00:07:20
cases published in 2014 and

00:07:24
2021. Next to Tim is

00:07:27
a sibling Adamson. He leads



00:07:30
the global energy dispute and

00:07:32
regulations Stickman and Charles River

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Associates is an energy Economist

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frequently serves as a liability

00:07:39
in Quantum expert in energy-related

00:07:41
arbitration, especially those involving oil

00:07:45
and gas LNG electric power

00:07:48
and renew. You also teaches

00:07:51
and finance department at Boston

00:07:53
College in this week or

00:07:54
throw up its textbook or

00:07:56
renewable project Finance. Last is

00:08:00
Natalia Mario. Sure. She's an



00:08:03

associate in barley wine. She

00:08:06

represents an advice as private

00:08:08

companies in a variety of

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complex litigation matters and international

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disputes in the state and

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federal courts as well. As

00:08:15

before I beat your ass.

00:08:16

He knows she has experience

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in dispute in a wide

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range of Industries including energy

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real estate manufacturing and Technology

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prior to starting in private

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practice Natalia worked as a



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leading international arbitration institutions advising

00:08:34
and managing International chases. So

00:08:37
with that introduction and knowing

00:08:39
our high-powered, I would like

00:08:42
to start the discussion with

00:08:45
a question posed to Natalia

00:08:47
and I think it's important

00:08:49
in this discussion. We understand

00:08:51
the legal framework first. I

00:08:53
think that's what we need

00:08:54
guides their expert and that's

00:08:56
what we do as will

00:08:58
yours be kind of giving



00:08:59

Directions to our experts it

00:09:02

would be useful. If you

00:09:03

could explain to the audience

00:09:05

the legal framework governing assessment

00:09:07

of damages on how price

00:09:10

for the three little fishes

00:09:11

make play out in that

00:09:13

context. Thank you for the

00:09:16

introduction and or husband and

00:09:20

I would like to start

00:09:22

by saying this is for

00:09:24

us a price volatility and

00:09:26

how it effects of London



00:09:36

survey. In the reported that

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the leading cause as noted

00:09:43

by survey respondents without you

00:09:45

the price volatility and it's

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cuz the leading cause notice

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by over 30% off of

00:09:52

North Council why why were

00:09:56

your enemy arbitration in general

00:10:04

in general as a concept

00:10:10

that drives the contractual instability

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right now in the current

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price environment many of the

00:10:17

cast in life are simply



00:10:18
refusing refusing to make payment

00:10:20
or perform are doing the

00:10:22
other contracts are now allowed

00:10:24
for nonpayment in certain specified.

00:10:26
Another Council noted the Bacon

00:10:29
number of disputes arising now

00:10:31
from other shipments of LNG

00:10:33
gas and very often respond.

00:10:39
Beaufort party who wish to

00:10:41
access contacts because they asked

00:10:43
what is the impact of

00:10:52
the price volatility and how

00:11:01
to account for the price



00:11:03

spike in. Participation and whether

00:11:05

it is international commercial arbitration

00:11:07

or investor-state arbitration, the principal

00:11:12

is Ultimate principle of the

00:11:14

ultimate aim is to never

00:11:27

occurred indeed the most cited

00:11:29

pays the most out of

00:11:31

steam Left 4 Dead under

00:11:33

the compensation and pension as

00:11:36

setting a hundred Factory. Which

00:11:39

provided that compensation should wipe

00:11:41

out all consequences of illegal

00:11:43

act and we established the



00:11:45

situation which would in all

00:11:47

probability have existed is that

00:11:49

I had not been committed

00:11:50

which princess now to the

00:11:53

exact moment in time where

00:11:54

did valuation of Damages should

00:11:56

the darker and which one

00:11:59

in time is going to

00:12:00

be it's going to happen

00:12:01

if the final number of

00:12:05

Damages the value of an

00:12:07

object changes time changes over

00:12:12

time and usually also the



00:12:14
considerable amount of time passage

00:12:16
from the moment of Freedom

00:12:17
award is one of the

00:12:23
fundamental questions as to which

00:12:26
we have to tackle is

00:12:29
to what extent to which

00:12:31
development of which occurred after

00:12:33
the illegal act or appropriation

00:12:35
pecan place may be included

00:12:38
in that. And can we

00:12:40
use can we use the

00:12:42
benefit of hindsight and apply

00:12:44
more recent out or I



00:12:45

can read data or must

00:12:47

we put ourselves in the

00:12:48

shoes of the person at

00:12:50

the surgeon valuation date in

00:12:52

the past in general International

00:12:54

laws in accordance with international

00:12:56

law practice for compensation for

00:13:00

local expropriation. However, when it

00:13:08

comes to unlawful expropriation, there

00:13:10

is a new China Rising

00:13:12

after the case is hungry

00:13:15

where the tribunal award at

00:13:16

the station was the valuation



00:13:18

date of the tribal Hollywood

00:13:21

award three years after the

00:13:24

creation play just had significant

00:13:28

impact on those damages because

00:13:30

I actually miss were able

00:13:32

to benefit from the four-year

00:13:35

gap between the moment of

00:13:37

the bridge and the Words

00:13:39

end in his face and

00:13:42

it does taste the claimants

00:13:43

were awarded the Bennett the

00:13:46

benefit of the significant increase

00:13:47

in value of that of



00:13:49

the odds of the official

00:13:52

but since then the question

00:13:55

of devaluation date should really

00:13:57

which valuation they should be

00:13:59

used to hurt really from

00:14:01

persistent frequent some tribunal use

00:14:04

valuation date is the date

00:14:06

of this but others when

00:14:08

determining evaluation day for Chris

00:14:10

on the weather on whether

00:14:11

that's for creation was local

00:14:13

and whether their value of

00:14:14

the property has free after



00:14:17
that. I spell creation creation

00:14:19
was unlawful and the value

00:14:21
of property has me be

00:14:23
the one for the tribunal

00:14:25
is now open find the

00:14:26
evaluating compensation at the date

00:14:31
of the award using the

00:14:33
enter information. Where at on

00:14:35
the other hand. Of the

00:14:39
measurement measures a party would

00:14:43
absorb the loss in value

00:14:44
of a Bollywood in compensation

00:14:45
at the other days of



00:14:47

the year. When it comes

00:14:50

to commercial arbitration to choice

00:14:51

of devaluation date depends on

00:14:53

the number of factors, but

00:14:54

most importantly it will depend

00:14:58

on the party and the

00:14:59

applicable law and justice for

00:15:01

all the tribunal in commercial

00:15:02

arbitration. Most often will be

00:15:04

looking to use when assessing

00:15:15

the damage on the other

00:15:17

hand in a civil. Our

00:15:18

country's claimants will pick up



00:15:23

latest at the date of

00:15:24

the decision to approach is

00:15:26

Wilkes-Barre from jurisdiction to jurisdiction

00:15:28

sell a purple valuation will

00:15:31

have to be careful review

00:15:34

of the law have to

00:15:37

be taken into account. But

00:15:41

even then the damages will

00:15:43

be almost always limited by

00:15:45

the force of the bullet

00:15:45

and this requirement will protect

00:15:48

the spending from unforeseeable stop

00:15:51

a result of the market



00:15:54

volatility of the market by

00:16:05

the ferry and evaluation database

00:16:07

of the damages claim were

00:16:09

where. Price may be higher.

00:16:14

Change to Natalia for that

00:16:16

introduction and letting us know

00:16:19

about how they age of

00:16:21

valuation in tracks with that.

00:16:23

I can wite-out Economist comment

00:16:27

on this and I know

00:16:28

this is maybe we are

00:16:29

opening the Pandora's box. But

00:16:32

anyway, maybe I can narrow



00:16:33

it down because of the

00:16:35

way that we essentially spit

00:16:38

out this stage for us

00:16:40

received that you can have

00:16:42

a bait of valuation as

00:16:44

the date of the breach

00:16:46

and then it takes a

00:16:48

long time after that and

00:16:49

I reach what is rendered

00:16:51

sound for 5 years. And

00:16:53

then the question is would

00:16:55

you like to have a

00:16:55

benefit of the hind side



00:16:56

or not and post Bridge

00:16:58

maybe their prices of Commodities

00:17:00

go up down. There may

00:17:02

be a lot of fluctuations

00:17:03

and then so once you

00:17:05

don't have a benefit of

00:17:07

hindsight and you just take

00:17:08

into account the information that

00:17:10

was available immediately before the

00:17:12

bridge, there is no Motoroma,

00:17:15

centrally for speculation right hand

00:17:18

side in my view probably

00:17:21

make it more certain, but



00:17:22
under Natalya's legal framework. You

00:17:26
only can do it when

00:17:27
you have a choice on

00:17:28
Alice's and I just want

00:17:30
to get to yourself than

00:17:32
anyone please wants to jumping.

00:17:36
Actress in terms of the

00:17:39
for the tribunal in the

00:17:42
case since it is 7

00:17:44
until the end when they

00:17:46
determine is it lawful or

00:17:47
unlawful continue to have to

00:17:50
present as a both days



00:17:52

as a date of taking

00:17:54

Kathy to come determination that

00:17:55

it's awful couldn't get one

00:17:57

value which has no rights

00:17:59

at all. And then a

00:18:01

fishing tournament is unlawful and

00:18:02

Go full charger case that

00:18:05

may need a later date

00:18:07

to consider both later date.

00:18:13

How do you think about

00:18:15

the fact that the investor

00:18:17

no longer was carrying the

00:18:19

rest of the investment between



00:18:20
the date of expropriation to

00:18:22
later date. So I would

00:18:26
be caused cognizant of that.

00:18:27
Especially Highway cyclical Industries. You

00:18:30
think about the cop capital

00:18:31
and higher and higher this

00:18:34
country and whether it is

00:18:37
They are to be compensated

00:18:38
for this extra years when

00:18:40
they master was not involved

00:18:42
with non barring any rest

00:18:43
to just some things to

00:18:46
consider a sin away is



00:18:50

a good segue to our

00:18:51

next question. Now that you're

00:18:53

talkin about cyclical Industries and

00:18:55

how all they are. Maybe

00:18:56

I can ask you that

00:18:57

question to Tim if you

00:18:59

would explain a little bit

00:19:01

Rusty, can specs of this

00:19:03

phenomenon. If you will tell

00:19:05

me the best maybe perhaps

00:19:07

an overview of what is

00:19:09

price volatility from cannot make

00:19:12

her more and then, that



00:19:14
recycles that was mentioned in

00:19:17
this what it what causes

00:19:19
it really that's kind of

00:19:23
a person but it seems

00:19:27
to be much more profound

00:19:29
than they have repercussions Financial

00:19:31
if you could you like

00:19:33
to know Share my screen

00:19:37
here. You're sitting here on

00:19:45
the screen or actually did

00:19:48
the heart rates of the

00:19:49
attorneys and the experts having

00:19:51
to analyze value during those



00:19:56
times. I must say that

00:19:57
I prepared a statement examples

00:20:11
of different Commodities as well

00:20:13
as kind of be the

00:20:15
cost of debt to look

00:20:16
in terms of volatility and

00:20:18
put him where we're different

00:20:20
time frames on on these

00:20:22
charts that one I wanted

00:20:23
to kind of talk about

00:20:24
different issues. If you walk

00:20:26
to kind of each of

00:20:26
these Commodities rent talk about



00:20:28

oil my talk about gold-copper

00:20:32

natural gas lithium, and they're

00:20:35

also talked about the invasive

00:20:38

did the US Treasury yields.

00:20:41

Go first to the Sea

00:20:46

and we're looking at the

00:20:49

intermediate crude price. So they

00:20:52

delivered in in in Texas

00:20:54

in oil is classically overtime

00:20:58

been a very cyclical commodity

00:21:04

that you see in Gray

00:21:06

work shows that the recession's

00:21:08

you see the the oil



00:21:09
changed it to plummet and

00:21:11
then it recovers over a.

00:21:13
Of time during the cycle

00:21:14
and then less other than

00:21:16
intervene in between oil and

00:21:20
peace in 2009 at \$200

00:21:22
a barrel and prices declined

00:21:24
and in 2015 and hit

00:21:28
a 12 year loan at

00:21:29
\$45 just a massive. I'm

00:21:32
spreading in the price of

00:21:33
oil in that period of

00:21:34
time and what caused it



00:21:36

as Borgia sort of crazy

00:21:38

out there you got supply

00:21:40

and demand issues. Impacting situation

00:21:44

in and throughout much of

00:21:45

this you also have a

00:21:47

public policy and regulation it

00:21:50

plays into both of supply

00:21:52

and demand. So what's happening

00:21:55

in 2015 and supply side

00:21:58

in like crazy and the

00:22:01

US was doing the same

00:22:02

on the demand side. As

00:22:05

long as you rest Europe



00:22:07

and Asia crow that is

00:22:08

well below would have been

00:22:09

a project at that time.

00:22:11

And so and then go

00:22:13

go forward and looking covid-19

00:22:15

\$2. So you got to

00:22:16

spread 2009 to the Tractor

00:22:19

and of the very very

00:22:20

brief Cochran covid \$20 a

00:22:23

barrel some people that were

00:22:25

basically paying people to take

00:22:27

their take you out of

00:22:28

the way. So no place



00:22:29

to store your recovery \$220

00:22:32

on the Ukraine Invasion. So

00:22:34

you can see there in

00:22:35

2022 to spike again following

00:22:39

the war as you saw

00:22:39

Energy prices. I got punished.

00:22:42

It's currently around \$80. So

00:22:45

as you look at busy

00:22:47

focusing on back to the

00:22:51

late 90s, alt really kind

00:22:53

of Stanley moving upward and

00:22:56

it is recognized the recession

00:22:58

and then again 2010 with



00:23:01

Dennis behave much more erratically

00:23:02

sense it as you look

00:23:03

to see it's nice no

00:23:05

longer climbing January. It is

00:23:08

down in absolute terms. So

00:23:10

to pay part where your

00:23:11

valuation date is on. This

00:23:13

chart is going to really

00:23:15

Drive substantially how you look

00:23:16

at how to price a

00:23:18

tacit or that business on

00:23:19

a go-forward basis. Astronaut of

00:23:29

gold and a small can



00:23:32
something be considered as a

00:23:33
safe-haven. I don't know the

00:23:34
people who bought it in

00:23:35
2011 according to chart felt

00:23:37
is that safe in the

00:23:38
Years following they lost a

00:23:40
big amount of what they

00:23:41
put into it, but generally

00:23:44
has used our weekends gold

00:23:46
typically increases as people looked

00:23:48
at as a safe haven

00:23:49
for the money. And when

00:23:51
the driver is the demand



00:23:52

for gold historically has been

00:23:54

jewelry Central Bank Reserves and

00:23:57

the increasingly industrial electronic Muses

00:24:00

and then you can see

00:24:03

any Peach back in 20

00:24:07

2011 at \$2,400 an ounce

00:24:12

and it's now currently at

00:24:14

20 after his feet again

00:24:17

during covid. So you should

00:24:19

be very reactionary to short-term

00:24:21

economic events and then over

00:24:24

a longer period of time

00:24:25

gold tends to follow Mountain.



00:24:28

Bigger macroeconomic things like in

00:24:30

our central banks buying up

00:24:32

a lot of gold to

00:24:34

fill the fill their vaults

00:24:35

with those sorts of things

00:24:35

or increasing use of gold

00:24:38

in electronic Goods. Turn out

00:24:44

of copper and copper has

00:24:47

been if you had a

00:24:49

longer. I'm showing here starting

00:24:51

back in 1990. It was

00:24:53

a very boring commodity which

00:24:55

is kind of chugging along



00:24:57

their kind of a dollar

00:24:58

a pound and then we

00:25:01

start seeing it grow quite

00:25:02

a bit in 2003 and

00:25:04

the Chinese demand. I drove

00:25:06

the gold prices too busy

00:25:08

quadrupled in time before the

00:25:11

financial the crash that happened

00:25:12

with the financial crisis, but

00:25:15

it quickly recovered from that

00:25:17

you're up to it for

00:25:19

dollars and thirty cents a

00:25:20

pound and by 2011 and



00:25:23

then again Chinese demand cool

00:25:25

to stash it when they're

00:25:26

they're building boom slow because

00:25:30

demand for copper in terms

00:25:32

of copper piping and wiring

00:25:34

and it is really cute

00:25:35

when you're building up big

00:25:37

residential blocks. But then copper

00:25:41

is seen to be crucial

00:25:42

renewable energy as it's not

00:25:45

recovered \$4.70 in 2021. Why

00:25:49

is that 25 times as

00:25:51

much copper is used in



00:25:52

a in a renewable plant

00:25:54

has been used in a

00:25:56

traditional a fossil fuel plant.

00:25:58

The Eagle Motor coils are

00:26:03

big man for but also

00:26:04

the the grid to deliver

00:26:07

electricity has been good more

00:26:08

more electric. We need to

00:26:10

we need a more robust

00:26:11

grid on a global basis

00:26:12

to deliver it. So this

00:26:14

tells you a lot of

00:26:15

whippet Supply drivers are and



00:26:17

we're going to see it

00:26:18

some other Commodities and even

00:26:20

this one and if people

00:26:21

making bets on how fast

00:26:23

renewable is taken up in

00:26:26

terms of both generation as

00:26:28

well as electric vehicles and

00:26:29

other electronics and people making

00:26:33

big bets on Commodities relative

00:26:35

to that demands have the

00:26:36

equation Turn down. The natural

00:26:40

gas industry represents us pricing

00:26:45

and just to think about



00:26:46

natural gas as a much

00:26:48

more localized price and because

00:26:50

it kind of comes out

00:26:50

the end of a pipeline

00:26:51

into a given market and

00:26:53

it can be transported LNG.

00:26:55

But as a general rule,

00:26:57

you're looking at the price

00:26:59

delivered in the in the

00:27:00

local market and this is

00:27:02

just focusing on the Louisiana

00:27:03

delivery Global because of the

00:27:08

delivery constraints price best beat



00:27:11

drops in half for 2010

00:27:12

to 2020 that's just due

00:27:15

to the huge amount of

00:27:17

gas produced in the US,

00:27:20

but then you see a

00:27:23

decline in a few. Of

00:27:25

time. So if you were

00:27:27

evaluating a natural gas and

00:27:31

driven business in 20 2009

00:27:35

their very high price point

00:27:37

and wanted for that amount

00:27:39

you would have suffered pretty

00:27:41

well during the decade from



00:27:43

2010 to 2020. If not

00:27:45

go bankrupt and then you

00:27:47

look and see a spike

00:27:49

again in it after bottomed

00:27:53

out during covid-19. I demand

00:27:56

and then you see a

00:27:57

spike up as we see

00:28:00

the war in Ukraine and

00:28:02

had a major impact as

00:28:03

you had two things happening

00:28:05

to you as we had

00:28:06

the one he trained driving

00:28:08

a demand for LNG and



00:28:11

a huge volume of LNG

00:28:12

plants coming online in the

00:28:14

US so I could take

00:28:15

that gas and transport to

00:28:17

where it's most needed in

00:28:18

Europe Beauty Supply. interruptions in

00:28:22

Europe in the war Do

00:28:26

you charge a lithium? Lithium

00:28:29

major ingredient in car batteries

00:28:33

in TVs and as you

00:28:36

can see the market spiked

00:28:39

up starting 2021 till 2020

00:28:45

to wear plateaued and then



00:28:47

despite to get a late

00:28:48

2022 until I crashed in

00:28:52

2023 and this is really

00:28:55

kind of a classic both

00:28:56

sides working here. You have

00:28:58

the Google Docs and rate

00:29:01

for electric vehicles is slowed

00:29:04

substantially in terms of where

00:29:05

they thought we'd be and

00:29:06

where we think we're going

00:29:07

as well as big Minds

00:29:11

coming on line in China

00:29:13

Brazil and Argentina. So you're



00:29:15

getting kind of going in

00:29:16

both directions. But again if

00:29:18

you were evaluating a lithium

00:29:22

mine in Yeah, 2022 let's

00:29:26

say you got a November

00:29:27

2020 to valuation date. You

00:29:32

looking back at what's been

00:29:33

a bubble in the prior

00:29:35

year and a half and

00:29:38

then that as you know,

00:29:39

9 side has collapsed. So

00:29:41

Marcus should have been his

00:29:43

boss was this in the



00:29:45
recent terms really challenged with

00:29:48
evaluator to find? What people

00:29:51
are paying for these assets

00:29:52
they want to look to

00:29:53
see can you see in

00:29:54
the marketplace have any lithium

00:29:56
mines your changed hands with

00:29:59
the mark and see what

00:29:59
people are really paying for

00:30:00
it because the risk to

00:30:02
the buyer is it that

00:30:03
is not an upward Trend

00:30:04
thereafter or the plateau doesn't



00:30:06

stay because off the cliff

00:30:08

of Nissan 2023. Every turn

00:30:13

down to debt and they

00:30:14

are you going to ask

00:30:14

why if I put dead

00:30:16

in here with these other

00:30:18

Commodities. Well if there's a

00:30:21

price for money and if

00:30:22

you look back in time

00:30:24

back in the eighties, you

00:30:25

see that in a 5-year

00:30:26

treasury bond is at 16%

00:30:29

And then as we go



00:30:31

post potential crisis, you look

00:30:35

to see that you and

00:30:36

us treasury bond basic average

00:30:37

around 2. If not below

00:30:40

2% So money was really

00:30:42

cheap and to be able

00:30:44

to get that for financing

00:30:46

deals as well as refinancing

00:30:49

projects. Look now post covid

00:30:53

with the spikes receipt go

00:30:55

back up or is looking

00:30:56

at it now at about

00:30:58

5% at the substantial different



00:31:01

cost in a project in

00:31:03

terms of the the cost

00:31:06

of the debt as well

00:31:07

as it impacts the discount

00:31:08

rates for using in terms

00:31:10

of value of project as

00:31:12

well. See if y'all go

00:31:13

to the funds were you

00:31:13

saying if it's costing that

00:31:15

much more to service the

00:31:15

debt because it's more expensive

00:31:16

a lot of lesser credits

00:31:19

are not qualifying for loans.



00:31:21

So that's just to give

00:31:23

it an example of a

00:31:25

different commodity markets and the

00:31:27

hear the financial Market an

00:31:31

idea of how volatile they

00:31:32

are overtime both ciprocal an

00:31:36

event-driven and how many things

00:31:38

you need to consider when

00:31:39

evaluating search the price in

00:31:42

a model evaluation? Okay, thank

00:31:48

you Tim for that comprehensive

00:31:50

introduction to the causes of

00:31:52

it and apply to man's



00:31:55
technology development policy and the

00:31:59
end the financial end of

00:32:02
interesting. I would like to

00:32:04
follow up on that now

00:32:08
that we need to have

00:32:08
to be questioned two siblings

00:32:10
your bill. How do you

00:32:14
fracture all of these elements

00:32:17
in an evaluation and maybe

00:32:22
a DCF valuation and how

00:32:25
did they list factors affect

00:32:27
perhaps cash flow analysis and

00:32:30
the discount rate calculation in



00:32:33

the rain with the end

00:32:35

of the Earth with but

00:32:36

maybe perhaps a little bit

00:32:37

more detailed explanation of them

00:32:40

would be very useful for

00:32:42

us. You sure I'm probably

00:32:45

the first answer is with

00:32:46

great difficulty has everyone who's

00:32:49

been an expert in these

00:32:50

things looking at Commodities markets

00:32:53

and stuff. Is it with

00:32:54

great difficulty because the world

00:32:56

is not forecast for Belen



00:32:57

detail and you know, we

00:33:00

can say things are cyclical

00:33:02

but they're not predictable if

00:33:04

they were predictable. I used

00:33:06

to I spent quite a

00:33:07

number of years of my

00:33:08

life working on Commodities trading

00:33:10

for a big Hedgehog and

00:33:11

his predictable we were to

00:33:13

make money off of it

00:33:14

and you don't always make

00:33:16

money of course, right? And

00:33:18

that's with all the best



00:33:19

analysis all the best technology

00:33:22

all the best will in

00:33:23

the world if things like

00:33:26

oil prices copper prices work

00:33:29

without predictable. I'm sorry, but

00:33:31

I wouldn't be sitting here

00:33:32

today because I probably would

00:33:35

be flying on my chest

00:33:36

to some tropical my own

00:33:37

private truck. That's the nature

00:33:44

of commodity forecast for any

00:33:46

commodity is and how to

00:33:49

but how do we still



00:33:50

have to think about things

00:33:51

pretty rigorous? Right? I mean

00:33:54

that's the charge is the

00:33:55

Gavin honest answer as best

00:33:59

we can all do it

00:34:01

involves. Always a level of

00:34:05

uncertainty. So couple of quick

00:34:07

observation based on temperatures will

00:34:09

first often because things change

00:34:14

I mean I've been involved

00:34:16

in the case and the

00:34:17

natural gas World analogy world

00:34:19

and the road and a



00:34:21

question is is it a

00:34:23

little before or a little

00:34:25

after the war in Ukraine?

00:34:27

Wow. Change natural gas prices

00:34:31

in Europe extremely dramatically even

00:34:34

more than the previous cuts

00:34:37

and Russian production to European

00:34:39

Union. So, you know, what

00:34:41

date are we talkin about

00:34:42

changes the legitimate expectation set

00:34:47

off basically everyone in the

00:34:49

Market at that time. Start

00:34:51

a note are generally these



00:34:54

are charged that are showing

00:34:55

very short-term Spot Price Rite

00:34:58

what we call front-month price

00:35:00

in trading oil for the

00:35:02

next mom delivery in the

00:35:04

next month. We do can

00:35:06

take some Solace that were

00:35:08

many Commodities. There are traded

00:35:11

Futures prices. They go out

00:35:13

into the future say for

00:35:14

Brent crude for Henry Hall

00:35:16

bar. TTI natural gas for

00:35:18

WTI for many Commodities copper



00:35:21

so we can look at

00:35:22

those prices out into the

00:35:24

future which are traded prices.

00:35:26

And one thing we do

00:35:27

know from the commodity and

00:35:30

financial literature is that typically

00:35:33

there's something called will be

00:35:34

called the term structure of

00:35:35

volatility. Meaning of stock prices

00:35:38

are most volatile and prices

00:35:41

vary longer-term prices change as

00:35:43

well, but not as much

00:35:45

so we can look at



00:35:47

prices out into the future.

00:35:49

They have some information. They

00:35:51

don't have complete information. But

00:35:55

that is at least it's

00:35:56

for a weekend. So a

00:35:59

couple of things over to

00:36:00

your question where do about

00:36:01

how to think about DC

00:36:02

out than his sort of

00:36:03

the financially rigorous way outside

00:36:07

of my job. I teach

00:36:08

in the finance department and

00:36:10

I get yelled at if



00:36:11
people start throwing around financial

00:36:14
terms and it in a

00:36:15
relatively non-recourse way. So the

00:36:19
first thing is we have

00:36:20
to come up with basic

00:36:21
expected cash flows and the

00:36:25
classic challenge here is okay

00:36:28
that involve the price for

00:36:29
cars, but also involve the

00:36:32
business 40. I'm going to

00:36:35
have a set of I'm

00:36:37
going to drill a set

00:36:38
of gas Wells offshore. Okay,



00:36:42

and here's how I think

00:36:43

this is going to play

00:36:44

out. Okay, that's nice. But

00:36:47

what risks are built into

00:36:49

that because that may be

00:36:51

a best case. I was

00:36:52

everything goes perfectly. I will

00:36:54

be getting gas out of

00:36:56

my weld November 2020 If

00:36:59

everything goes perfectly I'll get

00:37:01

this amount of gas and

00:37:03

then we have to think

00:37:04

about the price. Well, how



00:37:06

often does that happen? Right

00:37:08

we have to account for

00:37:10

that but to do it

00:37:11

correctly financially, we can't just

00:37:14

do that in discount rates.

00:37:15

We have to think about

00:37:16

the actual adjustments to cash

00:37:18

for because when we think

00:37:19

about in the financial literate

00:37:21

or everything to do with

00:37:23

valuation and stuff there difference

00:37:25

between systemic and non systemic

00:37:27

risks. Without turning this into



00:37:32

a finance class, but under

00:37:34

the capital asset pricing model.

00:37:35

We have to think about

00:37:37

things that are idiosyncratic the

00:37:40

cash flow has to do

00:37:41

with my project and then

00:37:42

in thinking about discounting we

00:37:45

have to think about how

00:37:46

were those risks related to

00:37:48

changes in Market risks as

00:37:50

a whole. Okay, so are

00:37:54

basic formula for doing that,

00:37:56

you know, two minutes is



00:37:59

come up with this good

00:38:01

ass out of expected cash

00:38:02

flows as you can accounting

00:38:05

for all of the idiosyncratic

00:38:07

risk is is his Tim's

00:38:10

cell project going to go

00:38:12

into service when he thinks

00:38:14

it is what kind of

00:38:15

problems are there blah, blah

00:38:17

blah, and then we have

00:38:18

to think about discounting those

00:38:20

which is the relationship between

00:38:22

those expected returns and expected



00:38:25
market returns. Okay, so why

00:38:28
we do have with you

00:38:30
if you can it's best

00:38:32
not to just say, oh,

00:38:34
we have a lot of

00:38:34
risk. We're going to play

00:38:35
a super high discount rate.

00:38:37
We should have applied. We

00:38:38
should apply the very of

00:38:40
the variation in Risk into

00:38:42
the cash flows as we

00:38:44
see it this vile thing.

00:38:46
I'll make a point to



00:38:47

is going back to all

00:38:49

forecast for Law and every

00:38:51

scenario that relies on a

00:38:54

single forecast is inaccurate. Now,

00:38:58

sometimes we have to have

00:38:59

a single scenario. We have

00:39:01

to come up for a

00:39:01

number but anyone who's actually

00:39:04

worth in a kind of

00:39:06

commercial side of advising on

00:39:08

projects realize it's been almost

00:39:11

no commercial Enterprise undertakes a

00:39:14

hundred million dollar or a



00:39:16

5 billion dollar investment project

00:39:19

around one price scenario if

00:39:22

it's possible think about different

00:39:25

outcomes, which are Effectively cenarios

00:39:28

of the world outside of

00:39:30

the control with the investor

00:39:31

right that are going to

00:39:34

offenses and there are skate.

00:39:36

There are cases where the

00:39:38

project may do great since

00:39:41

project may do great despite

00:39:43

the fact he's doing exactly

00:39:43

the same thing across those



00:39:45
scenarios. He didn't start the

00:39:47
war in Ukraine, right? The

00:39:50
price of gas goes up.

00:39:51
He does really well. There's

00:39:54
some huge gas find somewhere

00:39:55
else that no one predicted.

00:39:57
No one predicted the Shale

00:39:59
Revolution Marsh in the United

00:40:01
States if they had there

00:40:03
would have been large oil

00:40:04
companies that would have saved

00:40:05
or made billions of dollars,

00:40:07
right? It can't be predicted



00:40:10

in detail. So you have

00:40:12

to think about the range

00:40:13

of possible outcomes in order

00:40:15

to really logically do a

00:40:17

decent job. Now that I

00:40:28

discovered that it has worked

00:40:30

in the Wallace. I think

00:40:32

I want to understand how

00:40:34

Wallace treat people look similar

00:40:37

or there may be other

00:40:38

method rules of conduct that

00:40:40

use traffic price for a

00:40:42

New York volatile projects to



00:40:51

be here my first of

00:40:52

Washington arbitration week. I have

00:40:55

to preface my comments by

00:40:56

saying that there is like

00:40:57

my past experience did not

00:40:59

reflect Cornerstone Church used or

00:41:03

use of its clients of

00:41:09

course of action by Tim

00:41:16

20-30 years multiple Commodities went

00:41:20

through multiple cycles, and sometimes

00:41:22

it can be very vicious.

00:41:26

And Trust so what do

00:41:30

we typically do when Wall



00:41:31

Street so the analysts and

00:41:34

maybe I'll use that as

00:41:39

an illustration. So Royal Australian

00:42:04

\$140 a barrel on Wall

00:42:08

Street, you wouldn't be valuing

00:42:10

the company at swimming. That

00:42:12

spot price continues into so

00:42:16

what you're trying to do

00:42:17

is the next couple years.

00:42:18

You're trying to build an

00:42:19

explicit. Orica's Maybe by using

00:42:21

Cora curves. If it is

00:42:23

a liquid commodity there is



00:42:25

a real for real sometimes

00:42:28

and then you'll see you

00:42:30

but then I realized price

00:42:40

of mid cycle price where

00:42:42

supply-demand balance is up. So

00:42:45

when you were sitting here

00:42:46

at \$140 to debate on

00:42:48

Wall Street was isn't that

00:42:50

allowed at \$190 per barrel

00:42:54

and different people have different

00:42:57

views made and to figure

00:42:59

out that number you were

00:43:01

trying to figure out how



00:43:02

quick claim for example of

00:43:03

the Shale development can take

00:43:05

home how much money is

00:43:07

available different private Equity firms

00:43:09

who can Finance the development

00:43:11

how quickly the new production

00:43:13

will come on board. How

00:43:15

much is a new production

00:43:16

will come on board what

00:43:17

will happen to demand in

00:43:19

the meantime to absorb it

00:43:20

and if an analyst were

00:43:22

trying to build all these



00:43:24
different supplies man models trying

00:43:26
to figure out what point

00:43:27
does the pie Mash demand

00:43:29
is an increase in Supply

00:43:31
in there for a gradual

00:43:32
decline in price. And if

00:43:35
you look at the analyst

00:43:36
reports, you would see it

00:43:38
sometimes even on the front

00:43:40
page they would have a

00:43:41
table that has a forecast

00:43:42
for revenue and earnings and

00:43:46
sometimes it will have the



00:43:47
underlying commodity price and it

00:43:49
would have several years if

00:43:50
it's supposed to And then

00:43:52
there would be the last

00:43:52
column which would say it's

00:43:54
kind of a mid-cycle normalize

00:43:56
price and you can see

00:43:57
what price for commodity analyst

00:44:00
was Miley Cyrus's JPMorgan and

00:44:05
there's Market. I just asked

00:44:07
her and said nobody knows

00:44:09
everybody and the reasoning behind

00:44:16
the fact that you think



00:44:20

that the markets going to

00:44:21

normalize is that when you

00:44:23

have really high prices at

00:44:26

the peaks of the company

00:44:27

is a generating very attractive

00:44:28

margins, very attractive Returns on

00:44:30

Capital. So the stimulation of

00:44:32

the new oil wells will

00:44:37

be because it produces will

00:44:41

be trying to capture those

00:44:42

profits at some point. There's

00:44:46

enough capacity. If a dump

00:44:48

when the man drops then



00:44:50

suddenly your face. Excess capacity

00:44:52

the price is the price

00:44:54

then goes to a level

00:44:56

where the marginal producers somebody

00:44:58

visitor has its charms known

00:45:01

as cost producers in the

00:45:03

world or in that region

00:45:04

that ranked in terms of

00:45:06

their operating production cost and

00:45:08

so producers for the highest

00:45:10

cost and now starting to

00:45:12

be in trouble. So maybe

00:45:14

they're break even and then



00:45:15
they start losing money and

00:45:16
then depending on how much

00:45:18
they losing it with the

00:45:19
cost of clothes. They might

00:45:20
be shutting down capacity. They

00:45:22
might be shutting down mine

00:45:23
production and then with having

00:45:27
reduced capacity you now again

00:45:30
going back into balance. And

00:45:32
so when you doing a

00:45:34
DCF as I mentioned you

00:45:36
would be looking at it.

00:45:37
Maybe it's supposed to pour



00:45:38

this year's been pouring her

00:45:40

and then you will do

00:45:43

that model that will show

00:45:44

a gradual move towards the

00:45:46

mid cycle price and you

00:45:48

would use that type of

00:45:49

prize which is better. Fart

00:45:51

against returning Capital you're going

00:45:54

to try to figure out

00:45:54

what Bree turn castle that

00:45:56

would imply for the industry

00:45:57

and you can use that

00:45:59

as a measure of pricing



00:46:02

and stay out of years

00:46:03

and then to use that

00:46:04

in the terminals out so

00:46:06

I can 140 spices and

00:46:15

putting God into that model.

00:46:20

So then another thing that

00:46:22

is important to bear in

00:46:25

mind when you look in

00:46:26

the cyclical companies is their

00:46:29

ability to survive through this

00:46:30

site called and Associates of

00:46:33

Highly volatile companies for sale

00:46:36

since 2008 after the crisis.



00:46:38

Everybody was looking at the

00:46:39

abilities of the companies to

00:46:41

survive and will and it

00:46:42

did this normalize volume as

00:46:45

well as Ben we would

00:46:46

try and a number of

00:46:47

scenarios thinking at what commodity

00:46:49

price will that comes and

00:46:50

goes bye-bye. Do you really

00:46:52

look very carefully through their

00:46:54

liquidity situation can it survive

00:46:59

in the market and go

00:47:02

before Things Fall Apart? And



00:47:05

then I suggest if I

00:47:06

mean, this is something that

00:47:10

should be taken into consideration

00:47:12

because I sometimes I just

00:47:14

need anything from savings paying

00:47:15

bills without the balance sheet

00:47:17

and cash flow analysis and

00:47:20

out. Encourage or cyclical companies

00:47:23

to find a run through

00:47:24

the whole gamut and see

00:47:26

if the company on to

00:47:28

various scenarios, which is still

00:47:29

could be around the hospitality



00:47:31

is still visible and still

00:47:34

operating. Then if we turn

00:47:38

to another while you smell

00:47:39

that's message. When is the

00:47:41

volume of multiples which I

00:47:42

kind of uses a quick

00:47:44

hand. That's all you Jason

00:47:46

if you again if you

00:47:48

said \$140 oil and there's

00:47:51

a lot of companies generate

00:47:53

at that level. Then you

00:47:56

think you would either but

00:47:57

I'm also you're going to



00:47:58
put on that. Do you

00:47:59
really have to understand where

00:48:01
in the cycle you are

00:48:02
whether you're in the peak

00:48:03
and trough and Med and

00:48:05
the multiples change. So at

00:48:07
the peak when you have

00:48:08
high BW multiple, then when

00:48:13
you are in the bottom

00:48:14
at the trust that we

00:48:17
can put the peak and

00:48:19
I'm not talking specifically to

00:48:20
an industry, but you may



00:48:21
have a teeth multiple AIDS,

00:48:24
but you may have a

00:48:24
truck multiple of 18, so

00:48:28
I guess you need to

00:48:29
understand where you are with

00:48:31
multiple. Do you reply another

00:48:34
consideration? I would put their

00:48:37
is that we've been talkin

00:48:39
about Commodities Tyler's companies with

00:48:42
Marty sellers. You need to

00:48:43
think about companies Road Commodities

00:48:45
or a big input and

00:48:47
what that implies for those



00:48:49
companies whether they're able to

00:48:52
pass through into cost increases

00:48:54
are not where they have

00:48:55
to eat up into cost

00:48:56
increases for example, as a

00:48:58
company that's making making tractors

00:49:03
and still is a big

00:49:04
pencil and a Stihl price

00:49:06
goes up dramatically what happens

00:49:08
to that company's margins. You

00:49:10
have two things from many

00:49:13
aspects and you really need

00:49:15
to understand the business has



00:49:16

to do before casting starting

00:49:18

each mortgage company can be

00:49:20

in the unique position. It

00:49:21

has the role of vitamins

00:49:23

and their own abilities. And

00:49:29

whatever company dealing with you

00:49:31

really need to understand the

00:49:32

business model to be able

00:49:34

to look under the hood

00:49:35

of the market. I know

00:49:36

that company is fitter for

00:49:41

this explanation, which kind of

00:49:45

give us another perspective about



00:49:47

this phenomenal and how it

00:49:49

works in practice from a

00:49:52

valuation experts magistrate Wallace Street

00:49:55

from the perspective of a

00:49:56

lawyer. I like now to

00:49:58

turn back again to Natalia

00:50:01

unit because the reason that

00:50:03

I'm asking now we have

00:50:04

no be no all this

00:50:06

causes a price for life

00:50:08

cycles how they work and

00:50:11

one thing that strikes me

00:50:13

is that The fact that



00:50:15
price volatility exist everybody always

00:50:19
happen, what's up and down

00:50:29
which makes me think we

00:50:31
are lawyers usually come up

00:50:32
with some make an ism

00:50:34
to do with this thing.

00:50:36
I like want to ask

00:50:37
Maria Natalia to tell us

00:50:40
a little bit about that.

00:50:42
You can explain whether they're

00:50:44
in such mechanism in contracts

00:50:47
in the wall to throw

00:50:48
that could kind of helped



00:50:49

general rule of thumb is

00:51:02

staying as particularly applicable in

00:51:05

this County. I mean Close

00:51:14

53 off and lights. Are

00:51:16

you end up thinking about

00:51:26

when entering the long-term contract

00:51:29

specifically price review mechanism by

00:51:32

which as the name suggests

00:51:33

allow the life of the

00:51:35

contract for the parties through

00:51:37

the price of the price

00:51:39

calculation depending on certain on

00:51:42

changing market conditions. And this



00:51:44

is something that between definitely

00:51:46

a lot more popular and

00:51:48

and the party started Incorporated.

00:51:50

That's Steve guard into the

00:51:53

long-term contract, especially after the

00:51:56

Shale gas Revolution that overthrew

00:51:58

generally refer provide a procedure

00:52:04

that will be triggered by

00:52:07

certain events or other Market

00:52:09

condition parties companies provide for

00:52:12

flexibility. What kind of trigger

00:52:14

Events will allow for such

00:52:17

laws to to pretend by



00:52:20

Beatrice party. Sometimes want to

00:52:22

provide themselves for the flexibility

00:52:24

that also causes the triggering

00:52:27

event itself to be ambiguous.

00:52:28

Like how how radical the

00:52:31

change in the market has

00:52:32

to be for the parties

00:52:33

be able to renegotiate the

00:52:35

price of Canby Canby the

00:52:38

student. That's why it's really

00:52:39

important to purposely try and

00:52:42

surprise review mechanism and and

00:52:44

Define define the triggering event



00:52:47

so that when it happens

00:52:49

if parties have that option

00:52:50

when it happens at parties

00:52:52

usually try to negotiate price

00:52:54

and I'll be at that

00:52:55

point. There's already attention because

00:52:57

one party potentially will you

00:53:00

no benefit more from the

00:53:03

changing market conditions in theaters.

00:53:05

And when the police cannot

00:53:07

reach an agreement as to

00:53:08

revision of the price of

00:53:10

Riley translation that dispute will



00:53:12

then end up in arbitration.

00:53:14

Where is arbitration arbitrator as

00:53:17

well. I sent you revise

00:53:19

the price of the price

00:53:21

calculation for the linkage for

00:53:24

a great event such as

00:53:25

significant price of the commodity.

00:53:31

So they are there specific

00:53:42

commitments by the state which

00:53:44

are designed to Shield foreign

00:53:46

investors on the political risk

00:53:48

in particular subsequent adverse legislative

00:53:52

or regulatory changes, which also



00:53:54

can have a significant impact

00:53:55

on the prices of Commodities

00:53:57

and one example would be

00:53:59

all so freaking slow. Freeze

00:54:06

the domestic legislation or regulations

00:54:10

for the term of the

00:54:11

investment at the team at

00:54:13

the time of the agreement.

00:54:14

So under the legislation adopted

00:54:17

at the time of the

00:54:18

agreement will not apply to

00:54:20

that store and foreign investor

00:54:23

investors and a project for



00:54:25

example in a higher olive

00:54:27

oil prices from the host

00:54:31

government to raise taxes or

00:54:34

perhaps an ad windfall profit

00:54:36

tax the freezing Claus in

00:54:37

that example my help to

00:54:39

shoot investors from Todd and

00:54:41

investors to take advantage of

00:54:43

the high oil prices and

00:54:46

such so very often now,

00:54:54

they kind of are more

00:54:56

in the form of economic

00:54:58

equality closets which are similar



00:55:02

to the price price review

00:55:05

mechanism. Where the party is

00:55:06

the state in the front

00:55:07

investors will just sprinted go

00:55:09

she ate there at the

00:55:10

contract and the terms based

00:55:12

on what's what's happening in

00:55:13

the market and finally we

00:55:17

still have unicorn Smasher and

00:55:20

hardship closet switch now especially

00:55:22

after covid are almost, you

00:55:24

know, always always contemplated as

00:55:27

this party's enter into contracts



00:55:28

right now, depending on how

00:55:31

do you draft? It is

00:55:32

sometimes allow the parties to

00:55:34

completely to completely view relief

00:55:38

from performance or sometimes they'll

00:55:39

just allowed to Party Store

00:55:41

renegotiate the terms of the

00:55:44

contract applicable law will provide

00:55:48

for for a remedy for

00:55:52

under New York law frustration

00:55:55

of purpose will automatically be

00:55:57

applied to the contract to

00:55:59

the country to send it



00:56:00

under that log, but it's

00:56:01

not always so I would

00:56:03

say Given what we learn

00:56:08

now, and we know how

00:56:09

unexpected the futurist and we

00:56:12

really cannot for Dad. He

00:56:13

been assessed as much as

00:56:15

we wish there. Like we

00:56:16

cannot really put it where

00:56:17

we don't end up. The

00:56:19

best measure is still like

00:56:20

really prepare for the worst

00:56:22

and and truthfully draft that



00:56:24
contractual mechanism that would allow

00:56:25
the parties to either adjust

00:56:28
adjust a performance adjusted terms

00:56:31
of the contract before before.

00:56:35
You know, what the score

00:56:36
of the drug really really

00:56:38
hot? Thank you. I told

00:56:42
you 4 if so, I

00:56:44
just kind of completes our

00:56:46
coverage of the relevant legal

00:56:48
principles of planning to move

00:56:52
to some more specific questions.

00:56:54
If the panel is already



00:56:55

I think that's kind of

00:56:57

a picture of the general

00:57:00

ideas and the legal principle,

00:57:03

but what I want to

00:57:04

do, I just want to

00:57:06

feel a little for the

00:57:08

panel our economy may be

00:57:10

to comment on Some example

00:57:15

of project expansion optional maybe

00:57:18

seabron to want to comment

00:57:20

on that that how would

00:57:22

that work in the energy

00:57:24

industrial and gas straps are



00:57:26
renewable and how does price

00:57:31
for the activity may have

00:57:32
sex valuation in those specific

00:57:35
scenarios? When a project as

00:57:37
a combustion engine option of

00:57:40
the project into the future?

00:57:42
This is really, I'm not

00:57:45
just in the oil and

00:57:45
gas and Mining all kinds

00:57:47
of on primary Industries for

00:57:51
example, and in the end

00:57:53
it's really a offered in

00:57:54
an arbitration. I'm so I'm



00:57:58

going back to Tim is

00:58:00

his oil magnate here. He

00:58:02

wants to he's going to

00:58:03

drill some oil wells. Okay

00:58:05

in a specific area of

00:58:07

the field. Maybe he has

00:58:08

big blocks of land, you

00:58:11

know, he's leased to drill.

00:58:13

He's going to drill some

00:58:15

oil. Oh, okay. That's like

00:58:17

our phone call that are

00:58:18

Star are kind of starter

00:58:20

project. Right but he has



00:58:23
more land available than that

00:58:25
initial said well, maybe the

00:58:28
other roles are a little

00:58:29
higher, So he's going to

00:58:30
start with the initial set,

00:58:32
but if prices go higher

00:58:35
in the future, You know,

00:58:37
the price prices can change

00:58:39
over the future. They might

00:58:40
they might go higher that

00:58:42
Michael or if they're higher

00:58:44
he can start to drill

00:58:45
out more of that land



00:58:47
for a lot more of

00:58:47
that acreage and produce more

00:58:49
oil profitably if price is

00:58:52
golo. He might not want

00:58:54
to do that. Those oil

00:58:56
those new knows that second

00:58:58
set of Wells might not

00:59:00
be advantageous for him and

00:59:02
given that he can wait

00:59:04
a while. He can decide

00:59:06
not to drill that second

00:59:09
set which reduces his investment

00:59:12
costs horse races his return



00:59:14

so I can automatically that's

00:59:16

what we call a real

00:59:17

option meaning. It's it's an

00:59:20

option unlike a traded Financial

00:59:22

option. It's an option that

00:59:24

we exercise Drew doing something

00:59:26

in the real world and

00:59:28

this case making a new

00:59:29

investment and sending people out

00:59:31

to drill holes in the

00:59:32

ground, but in many cases

00:59:35

primary Oil gas mining other

00:59:39

commodity type things people have



00:59:42

an investment program that embodies

00:59:44

auction hours, right and the

00:59:47

cars whether I need weather

00:59:49

weather Detroit's to decide to

00:59:53

invest in that case depends

00:59:55

on the prices that we

00:59:57

see out into the future

00:59:58

that adds potential substantial value.

01:00:00

And that's the type of

01:00:03

thing we're off and looking

01:00:04

at is if there's an

01:00:06

expansion option, you know, if

01:00:09

if if there's a breach



01:00:11

early on did it not

01:00:14

only affect the potential kind

01:00:16

of starter project the initial

01:00:18

set of the Investments the

01:00:19

initial set of wheel wells,

01:00:20

but did it affect the

01:00:22

ability to go ahead had

01:00:24

prices turned out high for

01:00:26

which there was some probability

01:00:28

of of eliminating. Too and

01:00:31

that is a real loss

01:00:34

of value and then probably

01:00:35

people in peoples Actual commercial



01:00:38
operating plans will Encompass that

01:00:42
optionality when they think about

01:00:43
getting into the even for

01:00:46
the early stages of leasing

01:00:47
the land to make an

01:00:48
investment. They won't be maybe

01:00:51
considering different stages of that.

01:00:52
It's a rational thing to

01:00:54
do. That's how it will

01:00:55
accompany kind of undertakes its

01:00:57
capital budgeting process. So that

01:01:01
isn't a significant area of

01:01:05
Potential loss again. It's based



01:01:09
on expectations of different outcomes

01:01:13
of prices and what Peep

01:01:15
and what costs and profits

01:01:16
will be introduced to so

01:01:18
again, it's still not an

01:01:19
easy analysis to do but

01:01:22
it's not something that one

01:01:23
can Thank you what I

01:01:26
wanted but follow up on

01:01:28
me if it's probably better

01:01:30
if you tell us about

01:01:32
the same height works in

01:01:33
the mining sector and its



01:01:35
effect on various topics of

01:01:38
the truck. So if you

01:01:43
think about this oil field

01:01:45
help you well, you really

01:01:49
have time to send the

01:01:50
business again. So and you

01:01:52
as he mention you need

01:01:54
to think about the cost

01:01:55
of educating on. Option razor

01:01:57
for somebody if you were

01:01:58
small trailer and you don't

01:02:01
own sufficient, please cuz he

01:02:03
needs best hole drilling Fleet.



01:02:05

Can you rent a wheel

01:02:06

close? They are going to

01:02:07

be renting is it going

01:02:08

to be available? Are there

01:02:10

going to be people available

01:02:11

to drill? Because if you're

01:02:13

in that position your neighbors

01:02:14

in the same, so everybody

01:02:15

in the areas in the

01:02:16

brain, so can you to

01:02:24

carefully Thanks through the business

01:02:26

I keep going back. Are

01:02:27

you have to understand the



01:02:28

business? So in the mining

01:02:30

industry, typically you also have

01:02:33

to think very carefully about

01:02:34

the timing what is possible

01:02:37

what is not and how

01:02:38

long it takes. So for

01:02:40

some point if you have

01:02:41

a license or mine, there

01:02:44

are certain conditions under which

01:02:45

I could you have mine

01:02:46

for 5 years that license

01:02:48

can be withdrawn. Maybe you

01:02:51

have that maybe you don't



01:02:53
you have to understand it.

01:02:54
Let's say you have the

01:02:57
license for 10 years. You

01:02:59
can still kind of sit

01:03:00
there and wait when you

01:03:02
drink in line, let's have

01:03:03
dinner in iron ore mine.

01:03:04
You don't just dig the

01:03:06
dirt from the drugs. It

01:03:07
has to be trosa store

01:03:09
multiple facilities to to build

01:03:11
his facilities in the first

01:03:12
place depending on how big



01:03:15
of a processing plants you

01:03:17
want. It can be several

01:03:18
hundred million dollars by to

01:03:20
double the capacity. You can

01:03:22
bring it in the beginning

01:03:23
when you build a Do

01:03:25
you have to know how

01:03:26
big you wanted to be?

01:03:27
So if you want to

01:03:29
double it is going to

01:03:30
cost you. I don't know.

01:03:31
Maybe just add some more

01:03:32
to build right so it's



01:03:34
not like five years down

01:03:36
the road and the I

01:03:37
know price then I threw

01:03:38
the roof you can go

01:03:39
and do the second row

01:03:41
seating plan it even if

01:03:44
you decide to do that,

01:03:44
it's going to be very

01:03:45
costly and it will take

01:03:47
you a few years to

01:03:48
do. So by the time

01:03:49
you're done with it the

01:03:51
price for my already have



01:03:53

come down. If so kind

01:03:56

of goes back to real

01:03:57

understanding what they often is

01:04:00

how long it takes for

01:04:01

the costs are involved. What

01:04:04

are the competitors are going

01:04:04

to be doing? Maybe somebody

01:04:06

is sitting on the cheap

01:04:07

I nor mine and Australia

01:04:08

where they don't have to

01:04:09

go through this protesting and

01:04:10

they're doing fine. So I

01:04:14

know where which is her



01:04:15

class. I just froze his

01:04:16

name Devin be the first

01:04:17

ones to that at high

01:04:18

prices Again by the time

01:04:20

you do your American line

01:04:23

with extra capacity. I see

01:04:25

you have to go back

01:04:27

and understand that thank you

01:04:31

and best wishes and those

01:04:39

are startups in white panel.

01:04:44

If anybody has any comment

01:04:46

on the situation of a

01:04:47

starter wear for example the



01:04:49
startups that's their main business

01:04:52
model is old gas gold

01:04:55
something and how it how

01:04:57
would you go about that

01:04:58
to kind of come up

01:05:01
with that for her graduation

01:05:03
approach if you will. Well,

01:05:07
there's also two different kinds

01:05:10
of startups where you got

01:05:12
in a certain time to

01:05:13
11 investor that has the

01:05:15
right to do something with

01:05:17
no experience in the field.



01:05:19

I somehow got the concession

01:05:20

they're inexperienced and they may

01:05:23

have nothing other than they've

01:05:25

gotten the permit. They don't

01:05:27

have a feasibility study. They

01:05:28

don't have any financing at

01:05:30

Advance the project they don't

01:05:32

have any real personnel as

01:05:34

if one end of the

01:05:35

spectrum Spectrum, as you may

01:05:38

have experienced operator who has

01:05:39

a start-up project where they

01:05:42

have done some of that



01:05:44

work to start to understand

01:05:46

what are the economics of

01:05:47

the project and they've gotten

01:05:49

some of the regulatory approvals

01:05:50

after the first permit to

01:05:52

move it to 2 to

01:05:53

advance their rights to or

01:05:55

reproduction license, which makes a

01:05:57

big difference in terms of

01:05:58

advancement project to get it

01:06:00

closer to when they might

01:06:01

be real cash flows is

01:06:02

a real problem with a



01:06:03

lot of these basic Industries

01:06:05

is Get put down hundreds

01:06:08

of millions of dollars in

01:06:11

De cero once you start.

01:06:14

I can see cash for

01:06:16

a long. Of time. And

01:06:18

if you don't have a

01:06:20

advance plan when you're trying

01:06:22

to we were you have

01:06:23

a valuation date very difficult

01:06:26

to do and today surgery

01:06:29

to it without going in

01:06:30

and doing all the additional



01:06:31

work later. It's a buyer

01:06:33

would have to do drugs.

01:06:34

They were in your shoes

01:06:35

and you have to give

01:06:36

no plans. So early early

01:06:39

stage ones have very limited

01:06:41

value cuz they haven't done

01:06:43

the work to advance and

01:06:44

Beyond contractual right even if

01:06:47

their experience that would be

01:06:50

there. Experience there's potentially some

01:06:55

chance of a lie, but

01:06:56

if they haven't done anything



01:06:57

to advance the project is

01:06:59

what I'm really going to

01:07:00

do. Is it going to

01:07:01

be a 220 million per

01:07:05

year processing plant legal aspects

01:07:16

related to establish the probability

01:07:30

of profit and more comfortable.

01:07:32

The tribunal is going to

01:07:34

be awarding spatulas profit and

01:07:36

ask them exactly sad like

01:07:38

a start-up is not equal

01:07:40

to start up. So at

01:07:41

a startup with established with



01:07:44
agreements with customers already in

01:07:47
in a field of like

01:07:48
Commodities that it's a sort

01:07:50
of Recognize that it's very

01:07:56
going to be a very

01:07:57
different start up from like

01:07:58
a technology startup or you

01:08:00
know, you have and use

01:08:01
technology where you don't even

01:08:03
know the market or I'd

01:08:04
swear you have any experienced

01:08:06
investor. So in general from

01:08:10
from a legal perspective will



01:08:13

just try to see what

01:08:18

is the evidence that supporting

01:08:20

according to the prophet. That's

01:08:23

our start-up would be generating

01:08:24

and it's really a taste

01:08:26

of the more there is

01:08:28

to support such, you know

01:08:30

consultation the more likely it

01:08:33

is going to be that

01:08:34

much time. It is going

01:08:36

to be able to overcome

01:08:37

the objections of the damages

01:08:41

are merely speculative. Thank you



01:08:44
for the way we have

01:08:44
been going for an hour

01:08:45
and 5 minutes. I would

01:08:47
like to I need your

01:08:48
help. We can discuss more

01:08:49
and more and I think

01:08:51
I want to open it

01:08:51
to the questions if the

01:08:53
audience have to give it

01:08:54
a few minutes to the

01:08:55
audience to ask questions. 1

01:09:12
they are all ready for

01:09:15
you can keep all the



01:09:25
arbitrator's to evaluate today losses

01:09:29
in such investment disputes. Call

01:09:36
Doctor to review Des Plaines

01:09:39
Honda. What factors do they

01:09:41
are considering when making the

01:09:45
final decision since for a

01:09:50
question on one and it

01:09:53
really just depends on the

01:09:54
number of of a factors

01:09:56
and know that the number

01:09:57
one the first issue that

01:09:59
you have to think what

01:10:00
is devaluation Big ride because



01:10:02
it depends where weather devaluation

01:10:05
day. It is going to

01:10:06
be nappy throwing their Valley.

01:10:07
It will make a huge

01:10:08
huge difference. If you know,

01:10:10
we will be evaluating lithium

01:10:12
in 2018 versus 2022. I

01:10:16
think it was under the

01:10:25
if it's commercial arbitration. What

01:10:27
is the law for Cabool

01:10:28
to to The District

01:10:29
in investment in investor-state arbitration?

01:10:32
There will be no depend



01:10:34

on whether there was unlawful.

01:10:36

Expropriation or what does a

01:10:37

hasa apso lhasa distribution? So

01:10:41

in that case in general

01:10:44

that will be like the

01:10:45

moment of the bridge. So

01:10:46

once you have when you

01:10:48

look at the specific moment

01:10:49

in in in time on

01:10:51

the on the recall the

01:10:53

grass that we saw the

01:10:55

one line and then you

01:10:57

will have to sing what



01:10:59
it cost in the past

01:11:02
all of that then we

01:11:03
just want to try and

01:11:04
that's that the investor and

01:11:07
heard but you know estimating

01:11:10
the future cash flows at.

01:11:12
It's retarded. It's it's a

01:11:14
tricky business and end of

01:11:15
more set of evidence you

01:11:16
have depending on whether just

01:11:18
being already ongoing operation that's

01:11:20
been generating profits. And what

01:11:23
was the expectation and that



01:11:24

moment in time moving forward

01:11:27

that this business will be

01:11:28

generating if it is to

01:11:30

start up with any established

01:11:33

operations and an agreement with

01:11:36

What's a lot of unknown

01:11:37

that will you know that

01:11:39

will be a lot more

01:11:40

problematic for the tribunal to

01:11:42

to a word such damages

01:11:44

because they might consider them

01:11:46

jumping speculative. So I think

01:11:50

they're just a lot of



01:11:53

it's it's a very complex.

01:11:55

It's a very complex process.

01:11:58

That's why we like to

01:11:59

higher valuation expertflyer and they

01:12:04

will usually come up with

01:12:06

them at the dollar Gees

01:12:07

to you know, that's the

01:12:08

highest volume possible and the

01:12:10

other side is going to

01:12:11

hire a valuation expert and

01:12:13

Belgium are you know completely

01:12:20

different one and and the

01:12:21

tribunal will both of them



01:12:24

how you know each other

01:12:25

what assumptions were made about

01:12:27

the future it what how

01:12:29

much evidence was there to

01:12:31

support you no future. cash

01:12:36

flows and decision which I

01:12:39

don't envy she can thank

01:12:51

you end up. One to

01:12:57

question one is our price.

01:13:02

Google price volatility. Are they

01:13:06

a new phenomenon or are

01:13:13

we seeing or are we

01:13:14

simply seeing something that has



01:13:16
always been there? But we're

01:13:19
we're seeing it closely or

01:13:21
closer now and the end

01:13:24
of the second question would

01:13:25
be on Natalya's references to

01:13:29
some contractual possibilities to review

01:13:32
prices at cetera Are there

01:13:34
specific mechanisms are there? Eagle

01:13:39
at war or financial that

01:13:42
that you could use in

01:13:45
a valuation model 2 account

01:13:52
for greater stability of of

01:14:00
of those price hikes and



01:14:01

you can see me that

01:14:02

that that it's it's literally

01:14:04

random the work where you

01:14:07

are when the bridge was

01:14:09

made and where you are

01:14:11

where you went when the

01:14:13

the award comes out depending

01:14:19

on whether it's a law

01:14:20

for a lost like four

01:14:21

patients that are their mechanisms

01:14:24

that you could say. Well

01:14:25

we don't have this magic

01:14:28

ball, but we have a



01:14:29
mechanism to generally Take into

01:14:34
account a more stable behavior

01:14:37
of the prices or are

01:14:39
we simply know at the

01:14:41
stake of of of unpredictability?

01:14:46
I wish I knew a

01:14:51
magic mechanism. I think if

01:14:53
we all that had a

01:14:54
magic mechanism we probably would

01:14:56
have been using it by

01:14:57
now a first time at

01:14:59
the volatility is not new.

01:15:00
It's probably more observable in



01:15:03

the financial ization of a

01:15:06

lot of commodity Market that

01:15:08

products are traded in markets

01:15:10

for which there's published prices.

01:15:12

We can look up be

01:15:15

running away on her Bloomberg

01:15:16

screen, but you know, there's

01:15:19

always been just play Just

01:15:22

we'll probably not quite so

01:15:23

I'm to hear one thing

01:15:27

about the mechanisms on a

01:15:28

movie with some of it

01:15:28

maybe was in my questions



01:15:30
about in calculation of Damages.

01:15:31
You going to the questions

01:15:33
that not even speaking about

01:15:34
in terms of the creation

01:15:35
of stabilization mechanisms in contracts

01:15:40
the classic when is indexation

01:15:42
You mentioned a price review

01:15:43
mechanism, which is pretty heavily

01:15:45
used in the gas and

01:15:46
LNG world. For example, which

01:15:50
does okay, we're going to

01:15:51
have triggers where we're going

01:15:53
to say. Okay, the price



01:15:54

is not the whole price

01:15:56

isn't a good price anymore.

01:15:57

We can have a panels

01:16:00

coming in to set a

01:16:00

new price based on on

01:16:02

some criteria. The other classic

01:16:05

thing in many many cases

01:16:06

is that we have indexation

01:16:07

contracts. So, you know many

01:16:10

many contracts that are are

01:16:13

priced against somewhat or basket

01:16:17

of parallel Commodities, you know

01:16:20

gas that may be traded



01:16:22
somewhere very remote from Europe

01:16:25
or the United States. Usually

01:16:29
Europe may be tied to

01:16:30
ttf prices which are actually

01:16:32
in the nether. Many Commodities

01:16:35
are tied to oil prices

01:16:37
just because well there's our

01:16:40
lives there is correlation in

01:16:43
commodity prices due to changes

01:16:46
in the global economy. Many

01:16:47
things are traded with her

01:16:49
somehow index partially at least

01:16:52
two things like Consumer Price



01:16:55
indices Brent crude prices, which

01:16:57
are not those Commodities, but

01:17:01
it does give some way

01:17:02
for the price to evolve.

01:17:05
However imperfectly however, that may

01:17:08
be that the deal that

01:17:11
the parties agreed to at

01:17:12
the top. That's all they

01:17:14
said it. That's what they

01:17:16
like. white light My name

01:17:32
is a rock music station

01:17:56
on Applebee award. What if

01:17:58
things turn around and in



01:18:01
time get back to go

01:18:02
to the longer-term thing that

01:18:03
we saw two? What are

01:18:05
the options available, the more

01:18:19
times. Now we didn't lesson

01:18:33
11 months back to waiting.

01:18:34
So from that aspect, you

01:18:36
know you as legal practitioners

01:18:39
in the world. restful recommended

01:18:43
by Ciara. I can try

01:18:49
to rephrase your question. So

01:18:51
you asked me what are

01:18:52
the prices for a drop



01:19:01
or go open? And whether

01:19:02
we can like sit up

01:19:03
close. Ward somehow and adjustments

01:19:07
to 22. I would say

01:19:14
10 Ward has been rendered

01:19:16
based on the evidence during

01:19:19
the hearing and with whatever

01:19:22
valuation day. That was at.

01:19:24
I think once that's done

01:19:25
it's done and let you

01:19:28
know. Unfortunately, sometimes one party

01:19:30
will have to but will

01:19:32
benefit from it wouldn't fall



01:19:33
and and the other one

01:19:34
will work. But as soon

01:19:37
once the award has rendered

01:19:39
that ship has sailed and

01:19:41
it's it's a little bit

01:19:45
of You should always hope

01:19:49
for the best but be

01:19:50
ready for the worst and

01:19:51
that's why it's it's before

01:19:53
we get there. It's a

01:19:54
talk to have that they

01:19:55
look like a mechanism that

01:19:57
will allow you to to



01:19:59

to adjust, you know, when

01:20:03

you are when it's happening

01:20:05

rather than you know, you

01:20:07

know sell for in full

01:20:09

or or Plano. Do we

01:20:15

have one time for one

01:20:17

last question? Do you have

01:20:19

a question? Yes. crypto investment

01:20:32

in like a couple of

01:20:35

chocolate damages related to Do

01:20:54

they have a separate practice

01:20:57

which is very big and

01:20:59

deals with that would be



01:21:03

in a better position how

01:21:05

much more in the real

01:21:09

world and find so I

01:21:13

haven't seen in a state

01:21:16

case for sure on the

01:21:18

strip in a side that

01:21:19

has been contract Aces that

01:21:20

I've been aware of but

01:21:21

not seen how they've checked

01:21:23

a damn just given the

01:21:24

volatility within the day with

01:21:27

the asking my measuring. Yeah,

01:21:30

I mean first off the



01:21:32

whole question of assets which

01:21:34

effectively significantly speculative assets and

01:21:37

we got assets and remember

01:21:38

the difference between most of

01:21:40

the things we're talking about

01:21:41

in these case most arbitration

01:21:44

cases come down to something

01:21:46

to do with investment in

01:21:47

the physical business and that

01:21:49

physical business is designed one

01:21:52

hopes to generate some future

01:21:54

return as opposed to a

01:21:57

I said which could be



01:21:59
a cryptocurrency who would certainly

01:22:01
has potential future value value

01:22:04
fluctuations. I would guess but

01:22:07
has no future expected chain

01:22:10
of returns. Other than that

01:22:12
shakes back to difference in

01:22:13
them in his future value,

01:22:14
right? If I don't even

01:22:16
know right I buy a

01:22:18
painting a beautiful painting. I

01:22:21
love this painting. I'm going

01:22:22
to buy your painting and

01:22:23
I hope you know 10



01:22:25

years from now all of

01:22:27

you think this is a

01:22:27

super valuable painting in you're

01:22:29

going to buy it from

01:22:29

you for 50 times more

01:22:31

but there's no return to

01:22:33

me holding that asset that

01:22:35

painting in the first place

01:22:36

other than I can hang

01:22:37

it on my wall and

01:22:38

say it's nice right? So

01:22:41

it's a difference between something

01:22:42

like that. It's where you're



01:22:44

talking about a speculative asset

01:22:46

rather than an asset, which

01:22:47

is creating returns over time,

01:22:49

which is maybe what we're

01:22:50

dealing with. He knows how

01:22:53

to help people are going

01:22:54

to deal with these guys

01:22:57

ended that's not nothing. But

01:22:59

a financially you would think

01:23:01

they're that there is a

01:23:03

difference a day. Something which

01:23:06

is effectively in our future

01:23:09

value is based on the



01:23:10

idea of appreciation. Cuz if

01:23:13

I buy it the Bitcoin

01:23:15

price is X and if

01:23:16

I sell it 3 years

01:23:17

later and it's Axwell on

01:23:19

lots of money raised and

01:23:21

realtor. Totally different thing. Don't

01:23:28

you I think this pretty

01:23:30

much brings us to the

01:23:31

end of our time and

01:23:33

panel. I would like us

01:23:35

to all appreciate that kind

01:23:36

of risk. or good extra



00:01:06

Hello. Anyone, here we go

00:01:13

for the Nikon. I think

00:01:17

even if you have your

00:01:19

audio on not just the

00:01:20

mics is getting it Up

00:01:21

Update. Like I think I

00:01:24

think we're good. And I

00:01:31

didn't the cinema. That's the

00:01:32

old turn off our phone.

00:01:36

And dumb as I was

00:01:38

saying apologies for those that

00:01:41

are attending in person. There's

00:01:43

we have people that are



00:01:46
attending online. Even from China

00:01:49
from Japan from the names

00:01:51
that I can see and

00:01:52
and various other continent. So

00:01:54
it is with great pleasure

00:01:56
that I introduce. Dr. Boys

00:02:01
who sivani as our moderator

00:02:03
on a topic that that

00:02:06
perhaps many of us have

00:02:07
asked ourselves quite a few

00:02:10
times mostly in in the

00:02:12
in the last several years.

00:02:14
What what is the impact



00:02:17

of of that phenomenon in

00:02:20

in international arbitration and international

00:02:24

arbitration cases? What is the

00:02:26

impact of price of global

00:02:31

volatility in in Diamond? Calculations

00:02:37

and the effects of those

00:02:39

spikes in prices in in

00:02:44

the case has posed for

00:02:45

claimants and for responding so

00:02:50

that that is a topic

00:02:51

that we have chosen and

00:02:52

as you might know we

00:02:54

choose a topic sometimes from



00:02:57

input from our Advisory board

00:03:00

members, but we'll still choose

00:03:02

the topics from conversations with

00:03:05

the stakeholders investment on International

00:03:10

commercial arbitration. We talked to

00:03:12

the experts in were two

00:03:14

boys and one and on

00:03:16

others are we get the

00:03:18

feedback from the experts but

00:03:20

also from from arbitration attorneys

00:03:25

and also arbitrators as well

00:03:26

as a as a stakeholders

00:03:30

in in various industry. So



00:03:31
this is one of the

00:03:32
topics that hadn't been addressed

00:03:34
before in Washington arbitration week.

00:03:36
I know that we would

00:03:37
like to bring a number

00:03:39
of experts to address. The

00:03:41
topic is a moderator as

00:03:45
I was indicating. She he

00:03:47
is one of the leading

00:03:49
experts in Damages from the

00:03:52
council to perspective and the

00:03:54
before being he went to

00:03:58
Georgetown University Law Center and



00:04:00

I happen to be also

00:04:04

a fellow student of his

00:04:06

because we we completed the

00:04:09

sat with the same supervisor.

00:04:11

So we've come a long

00:04:12

way and and I think

00:04:14

of no other the best

00:04:16

person to moderate this I

00:04:19

know because of his knowledge

00:04:20

and damages but he's his

00:04:22

knowledge on the connection between

00:04:23

the investment arbitration field as

00:04:26

Council and the damages so



00:04:28

weird that abortion. Thank you

00:04:30

and that you have a

00:04:31

sore. Generous pay introduction. Hello

00:04:39

everyone. I'm delighted to be

00:04:41

here today. And as was

00:04:45

explained the topic is a

00:04:47

very interesting price volatility my

00:04:51

personal experience with that topic

00:04:55

is being involved in some

00:04:56

very large old old old

00:04:59

fastest route to wear their

00:05:02

determination of the price was

00:05:05

a very important that the



00:05:07

center of the chest open

00:05:09

price volatility is just doesn't

00:05:12

come in the context of

00:05:13

oil and gas disputed every

00:05:15

kind of dispute involving some

00:05:17

Commodities beer prices go up

00:05:19

and down at some level

00:05:21

this matter making to be

00:05:23

important and it today I'll

00:05:26

goal is to explore some

00:05:29

of the legal aspects of

00:05:31

a price for like to

00:05:32

see how it can be



00:05:33

kind of control over how

00:05:34

an international arbitration. It comes

00:05:37

up and also explore a

00:05:40

how to valuation experts control

00:05:45

it and put a value

00:05:46

on it how they can

00:05:47

use it to run the

00:05:48

valuations and for that we

00:05:50

have a very distinguished and

00:05:51

we are honored to be

00:05:54

with them and introduce them

00:05:56

to you to my left

00:05:57

is as Vetter in the



00:05:59

front. She's a senior Economist

00:06:02

with Cornerstone research in New

00:06:04

York is specializes in financial

00:06:06

analysis valuation and damage assessment.

00:06:09

She actually working multiple investor-state

00:06:14

and Commercial arbitration Consulting on

00:06:17

issues related to economic feasibility

00:06:19

market conditions Quantum of Damages

00:06:22

in the variety of contexts.

00:06:24

She hasn't worked on the

00:06:26

Commodities energy mining consumer and

00:06:28

media cases prior to becoming

00:06:31

a testifying expert. That's what



00:06:33

they spent two decades as

00:06:35

a portfolio manager. Your coochie

00:06:37

and understand fixed income and

00:06:39

derivatives Trader are the leading

00:06:41

asset manager and Global investment

00:06:44

Banks next to expect on

00:06:46

her on her last part

00:06:48

is a partner with HK

00:06:51

in Washington d.c. Israel recognized

00:06:54

expert in valuation and damages

00:06:56

in international arbitration. Tim has

00:06:59

served as a suspect in

00:07:00

over 65 International arbitration including



00:07:04

more than 45 investor-state cases.

00:07:07

His experience includes numerous Mining

00:07:10

and energy dispute as well.

00:07:12

As numerous cases involving basic

00:07:15

Metals team is the co-author

00:07:17

of a comprehensive study of

00:07:19

Damages investor-state cases published in

00:07:22

2014 and 2021. Next to

00:07:26

Tim is a sibling Adamson.

00:07:29

He leads the global energy

00:07:31

dispute and regulations Stickman and

00:07:33

Charles River Associates is an

00:07:36

energy Economist frequently serves as



00:07:39

a liability in Quantum expert

00:07:41

in energy-related arbitration, especially those

00:07:44

involving oil and gas LNG

00:07:47

electric power and renew. You

00:07:50

also teaches and finance department

00:07:52

at Boston College in this

00:07:54

week or throw up its

00:07:55

textbook or renewable project Finance.

00:07:59

Last is Natalia Mario. Sure.

00:08:02

She's an associate in barley

00:08:04

wine. She represents an advice

00:08:07

as private companies in a

00:08:08

variety of complex litigation matters



00:08:11

and international disputes in the

00:08:13

state and federal courts as

00:08:15

well. As before I beat

00:08:16

your ass. He knows she

00:08:17

has experience in dispute in

00:08:19

a wide range of Industries

00:08:21

including energy real estate manufacturing

00:08:25

and Technology prior to starting

00:08:27

in private practice Natalia worked

00:08:30

as a leading international arbitration

00:08:31

institutions advising and managing International

00:08:36

chases. So with that introduction

00:08:39

and knowing our high-powered, I



00:08:41

would like to start the

00:08:43

discussion with a question posed

00:08:46

to Natalia and I think

00:08:48

it's important in this discussion.

00:08:50

We understand the legal framework

00:08:52

first. I think that's what

00:08:54

we need guides their expert

00:08:56

and that's what we do

00:08:57

as will yours be kind

00:08:58

of giving Directions to our

00:09:00

experts it would be useful.

00:09:02

If you could explain to

00:09:04

the audience the legal framework



00:09:06
governing assessment of damages on

00:09:08
how price for the three

00:09:11
little fishes make play out

00:09:12
in that context. Thank you

00:09:15
for the introduction and or

00:09:19
husband and I would like

00:09:22
to start by saying this

00:09:23
is for us a price

00:09:25
volatility and how it effects

00:09:27
of London survey. In the

00:09:40
reported that the leading cause

00:09:42
as noted by survey respondents

00:09:44
without you the price volatility



00:09:46

and it's cuz the leading

00:09:49

cause notice by over 30%

00:09:51

off of North Council why

00:09:55

why were your enemy arbitration

00:09:58

in general in general as

00:10:08

a concept that drives the

00:10:11

contractual instability right now in

00:10:15

the current price environment many

00:10:17

of the cast in life

00:10:18

are simply refusing refusing to

00:10:20

make payment or perform are

00:10:22

doing the other contracts are

00:10:23

now allowed for nonpayment in



00:10:25
certain specified. Another Council noted

00:10:29
the Bacon number of disputes

00:10:30
arising now from other shipments

00:10:32
of LNG gas and very

00:10:34
often respond. Beaufort party who

00:10:41
wish to access contacts because

00:10:43
they asked what is the

00:10:51
impact of the price volatility

00:10:53
and how to account for

00:11:02
the price spike in. Participation

00:11:04
and whether it is international

00:11:07
commercial arbitration or investor-state arbitration,

00:11:09
the principal is Ultimate principle



00:11:14

of the ultimate aim is

00:11:18

to never occurred indeed the

00:11:29

most cited pays the most

00:11:31

out of steam Left 4

00:11:32

Dead under the compensation and

00:11:34

pension as setting a hundred

00:11:37

Factory. Which provided that compensation

00:11:40

should wipe out all consequences

00:11:42

of illegal act and we

00:11:44

established the situation which would

00:11:46

in all probability have existed

00:11:48

is that I had not

00:11:50

been committed which princess now



00:11:52

to the exact moment in

00:11:54

time where did valuation of

00:11:55

Damages should the darker and

00:11:58

which one in time is

00:11:59

going to be it's going

00:12:00

to happen if the final

00:12:04

number of Damages the value

00:12:07

of an object changes time

00:12:10

changes over time and usually

00:12:13

also the considerable amount of

00:12:15

time passage from the moment

00:12:17

of Freedom award is one

00:12:23

of the fundamental questions as



00:12:24

to which we have to

00:12:28

tackle is to what extent

00:12:29

to which development of which

00:12:32

occurred after the illegal act

00:12:34

or appropriation pecan place may

00:12:38

be included in that. And

00:12:40

can we use can we

00:12:42

use the benefit of hindsight

00:12:43

and apply more recent out

00:12:45

or I can read data

00:12:45

or must we put ourselves

00:12:48

in the shoes of the

00:12:49

person at the surgeon valuation



00:12:51

date in the past in

00:12:53

general International laws in accordance

00:12:55

with international law practice for

00:12:59

compensation for local expropriation. However,

00:13:07

when it comes to unlawful

00:13:08

expropriation, there is a new

00:13:11

China Rising after the case

00:13:14

is hungry where the tribunal

00:13:16

award at the station was

00:13:17

the valuation date of the

00:13:19

tribal Hollywood award three years

00:13:24

after the creation play just

00:13:28

had significant impact on those



00:13:29

damages because I actually miss

00:13:31

were able to benefit from

00:13:33

the four-year gap between the

00:13:36

moment of the bridge and

00:13:37

the Words end in his

00:13:40

face and it does taste

00:13:43

the claimants were awarded the

00:13:45

Bennett the benefit of the

00:13:46

significant increase in value of

00:13:48

that of the odds of

00:13:50

the official but since then

00:13:55

the question of devaluation date

00:13:56

should really which valuation they



00:13:59

should be used to hurt

00:14:00

really from persistent frequent some

00:14:03

tribunal use valuation date is

00:14:05

the date of this but

00:14:07

others when determining evaluation day

00:14:10

for Chris on the weather

00:14:11

on whether that's for creation

00:14:12

was local and whether their

00:14:14

value of the property has

00:14:15

free after that. I spell

00:14:17

creation creation was unlawful and

00:14:21

the value of property has

00:14:22

me be the one for



00:14:24

the tribunal is now open

00:14:25

find the evaluating compensation at

00:14:31

the date of the award

00:14:32

using the enter information. Where

00:14:34

at on the other hand.

00:14:39

Of the measurement measures a

00:14:42

party would absorb the loss

00:14:44

in value of a Bollywood

00:14:45

in compensation at the other

00:14:47

days of the year. When

00:14:49

it comes to commercial arbitration

00:14:50

to choice of devaluation date

00:14:52

depends on the number of



00:14:53
factors, but most importantly it

00:14:57
will depend on the party

00:14:58
and the applicable law and

00:15:00
justice for all the tribunal

00:15:02
in commercial arbitration. Most often

00:15:04
will be looking to use

00:15:15
when assessing the damage on

00:15:16
the other hand in a

00:15:18
civil. Our country's claimants will

00:15:21
pick up latest at the

00:15:23
date of the decision to

00:15:25
approach is Wilkes-Barre from jurisdiction

00:15:27
to jurisdiction sell a purple



00:15:30

valuation will have to be

00:15:33

careful review of the law

00:15:34

have to be taken into

00:15:39

account. But even then the

00:15:41

damages will be almost always

00:15:44

limited by the force of

00:15:45

the bullet and this requirement

00:15:48

will protect the spending from

00:15:49

unforeseeable stop a result of

00:15:53

the market volatility of the

00:16:00

market by the ferry and

00:16:05

evaluation database of the damages

00:16:08

claim were where. Price may



00:16:11

be higher. Change to Natalia

00:16:15

for that introduction and letting

00:16:19

us know about how they

00:16:20

age of valuation in tracks

00:16:22

with that. I can wite-out

00:16:24

Economist comment on this and

00:16:28

I know this is maybe

00:16:29

we are opening the Pandora's

00:16:31

box. But anyway, maybe I

00:16:33

can narrow it down because

00:16:34

of the way that we

00:16:36

essentially spit out this stage

00:16:39

for us received that you



00:16:42

can have a bait of

00:16:43

valuation as the date of

00:16:45

the breach and then it

00:16:47

takes a long time after

00:16:49

that and I reach what

00:16:50

is rendered sound for 5

00:16:52

years. And then the question

00:16:53

is would you like to

00:16:55

have a benefit of the

00:16:56

hind side or not and

00:16:57

post Bridge maybe their prices

00:17:00

of Commodities go up down.

00:17:02

There may be a lot



00:17:02

of fluctuations and then so

00:17:04

once you don't have a

00:17:06

benefit of hindsight and you

00:17:08

just take into account the

00:17:09

information that was available immediately

00:17:11

before the bridge, there is

00:17:13

no Motoroma, centrally for speculation

00:17:17

right hand side in my

00:17:19

view probably make it more

00:17:21

certain, but under Natalya's legal

00:17:25

framework. You only can do

00:17:27

it when you have a

00:17:28

choice on Alice's and I



00:17:30

just want to get to

00:17:31

yourself than anyone please wants

00:17:34

to jumping. Actress in terms

00:17:39

of the for the tribunal

00:17:41

in the case since it

00:17:44

is 7 until the end

00:17:45

when they determine is it

00:17:47

lawful or unlawful continue to

00:17:49

have to present as a

00:17:52

both days as a date

00:17:53

of taking Kathy to come

00:17:54

determination that it's awful couldn't

00:17:57

get one value which has



00:17:58

no rights at all. And

00:18:00

then a fishing tournament is

00:18:01

unlawful and Go full charger

00:18:03

case that may need a

00:18:06

later date to consider both

00:18:08

later date. How do you

00:18:15

think about the fact that

00:18:16

the investor no longer was

00:18:18

carrying the rest of the

00:18:19

investment between the date of

00:18:21

expropriation to later date. So

00:18:25

I would be caused cognizant

00:18:27

of that. Especially Highway cyclical



00:18:29

Industries. You think about the

00:18:30

cop capital and higher and

00:18:33

higher this country and whether

00:18:36

it is They are to

00:18:38

be compensated for this extra

00:18:39

years when they master was

00:18:41

not involved with non barring

00:18:43

any rest to just some

00:18:45

things to consider a sin

00:18:49

away is a good segue

00:18:51

to our next question. Now

00:18:52

that you're talkin about cyclical

00:18:54

Industries and how all they



00:18:56

are. Maybe I can ask

00:18:57

you that question to Tim

00:18:59

if you would explain a

00:19:00

little bit Rusty, can specs

00:19:03

of this phenomenon. If you

00:19:04

will tell me the best

00:19:05

maybe perhaps an overview of

00:19:08

what is price volatility from

00:19:11

cannot make her more and

00:19:13

then, that recycles that was

00:19:16

mentioned in this what it

00:19:18

what causes it really that's

00:19:23

kind of a person but



00:19:25

it seems to be much

00:19:27

more profound than they have

00:19:29

repercussions Financial if you could

00:19:33

you like to know Share

00:19:36

my screen here. You're sitting

00:19:44

here on the screen or

00:19:47

actually did the heart rates

00:19:48

of the attorneys and the

00:19:50

experts having to analyze value

00:19:54

during those times. I must

00:19:57

say that I prepared a

00:20:09

statement examples of different Commodities

00:20:12

as well as kind of



00:20:14
be the cost of debt

00:20:16
to look in terms of

00:20:16
volatility and put him where

00:20:19
we're different time frames on

00:20:21
on these charts that one

00:20:23
I wanted to kind of

00:20:23
talk about different issues. If

00:20:25
you walk to kind of

00:20:26
each of these Commodities rent

00:20:28
talk about oil my talk

00:20:30
about gold-copper natural gas lithium,

00:20:34
and they're also talked about

00:20:36
the invasive did the US



00:20:38

Treasury yields. Go first to

00:20:43

the Sea and we're looking

00:20:48

at the intermediate crude price.

00:20:52

So they delivered in in

00:20:53

in Texas in oil is

00:20:57

classically overtime been a very

00:21:01

cyclical commodity that you see

00:21:05

in Gray work shows that

00:21:07

the recession's you see the

00:21:08

the oil changed it to

00:21:10

plummet and then it recovers

00:21:12

over a. Of time during

00:21:13

the cycle and then less



00:21:15

other than intervene in between

00:21:18

oil and peace in 2009

00:21:22

at \$200 a barrel and

00:21:23

prices declined and in 2015

00:21:28

and hit a 12 year

00:21:28

loan at \$45 just a

00:21:31

massive. I'm spreading in the

00:21:33

price of oil in that

00:21:34

period of time and what

00:21:35

caused it as Borgia sort

00:21:37

of crazy out there you

00:21:39

got supply and demand issues.

00:21:41

Impacting situation in and throughout



00:21:45

much of this you also

00:21:46

have a public policy and

00:21:49

regulation it plays into both

00:21:52

of supply and demand. So

00:21:54

what's happening in 2015 and

00:21:57

supply side in like crazy

00:22:00

and the US was doing

00:22:02

the same on the demand

00:22:04

side. As long as you

00:22:06

rest Europe and Asia crow

00:22:08

that is well below would

00:22:09

have been a project at

00:22:10

that time. And so and



00:22:13

then go go forward and

00:22:14

looking covid-19 \$2. So you

00:22:16

got to spread 2009 to

00:22:19

the Tractor and of the

00:22:20

very very brief Cochran covid

00:22:21

\$20 a barrel some people

00:22:25

that were basically paying people

00:22:27

to take their take you

00:22:28

out of the way. So

00:22:28

no place to store your

00:22:30

recovery \$220 on the Ukraine

00:22:33

Invasion. So you can see

00:22:34

there in 2022 to spike



00:22:36

again following the war as

00:22:39

you saw Energy prices. I

00:22:41

got punished. It's currently around

00:22:43

\$80. So as you look

00:22:46

at busy focusing on back

00:22:50

to the late 90s, alt

00:22:52

really kind of Stanley moving

00:22:54

upward and it is recognized

00:22:57

the recession and then again

00:22:59

2010 with Dennis behave much

00:23:01

more erratically sense it as

00:23:03

you look to see it's

00:23:04

nice no longer climbing January.



00:23:07

It is down in absolute

00:23:09

terms. So to pay part

00:23:11

where your valuation date is

00:23:12

on. This chart is going

00:23:14

to really Drive substantially how

00:23:16

you look at how to

00:23:17

price a tacit or that

00:23:18

business on a go-forward basis.

00:23:28

Astronaut of gold and a

00:23:31

small can something be considered

00:23:32

as a safe-haven. I don't

00:23:34

know the people who bought

00:23:35

it in 2011 according to



00:23:37

chart felt is that safe

00:23:38

in the Years following they

00:23:39

lost a big amount of

00:23:41

what they put into it,

00:23:42

but generally has used our

00:23:45

weekends gold typically increases as

00:23:47

people looked at as a

00:23:49

safe haven for the money.

00:23:50

And when the driver is

00:23:52

the demand for gold historically

00:23:54

has been jewelry Central Bank

00:23:56

Reserves and the increasingly industrial

00:23:59

electronic Muses and then you



00:24:02

can see any Peach back

00:24:06

in 20 2011 at \$2,400

00:24:11

an ounce and it's now

00:24:13

currently at 20 after his

00:24:15

feet again during covid. So

00:24:18

you should be very reactionary

00:24:20

to short-term economic events and

00:24:23

then over a longer period

00:24:25

of time gold tends to

00:24:27

follow Mountain. Bigger macroeconomic things

00:24:29

like in our central banks

00:24:31

buying up a lot of

00:24:33

gold to fill the fill



00:24:34
their vaults with those sorts

00:24:35
of things or increasing use

00:24:37
of gold in electronic Goods.

00:24:44
Turn out of copper and

00:24:46
copper has been if you

00:24:48
had a longer. I'm showing

00:24:50
here starting back in 1990.

00:24:52
It was a very boring

00:24:54
commodity which is kind of

00:24:55
chugging along their kind of

00:24:58
a dollar a pound and

00:25:01
then we start seeing it

00:25:01
grow quite a bit in



00:25:03

2003 and the Chinese demand.

00:25:05

I drove the gold prices

00:25:07

too busy quadrupled in time

00:25:10

before the financial the crash

00:25:12

that happened with the financial

00:25:13

crisis, but it quickly recovered

00:25:17

from that you're up to

00:25:18

it for dollars and thirty

00:25:19

cents a pound and by

00:25:22

2011 and then again Chinese

00:25:24

demand cool to stash it

00:25:26

when they're they're building boom

00:25:29

slow because demand for copper



00:25:31
in terms of copper piping

00:25:33
and wiring and it is

00:25:35
really cute when you're building

00:25:36
up big residential blocks. But

00:25:40
then copper is seen to

00:25:42
be crucial renewable energy as

00:25:44
it's not recovered \$4.70 in

00:25:47
2021. Why is that 25

00:25:50
times as much copper is

00:25:52
used in a in a

00:25:53
renewable plant has been used

00:25:55
in a traditional a fossil

00:25:58
fuel plant. The Eagle Motor



00:26:02

coils are big man for

00:26:03

but also the the grid

00:26:06

to deliver electricity has been

00:26:08

good more more electric. We

00:26:10

need to we need a

00:26:10

more robust grid on a

00:26:12

global basis to deliver it.

00:26:13

So this tells you a

00:26:15

lot of whippet Supply drivers

00:26:16

are and we're going to

00:26:18

see it some other Commodities

00:26:20

and even this one and

00:26:21

if people making bets on



00:26:22

how fast renewable is taken

00:26:26

up in terms of both

00:26:26

generation as well as electric

00:26:29

vehicles and other electronics and

00:26:32

people making big bets on

00:26:34

Commodities relative to that demands

00:26:36

have the equation Turn down.

00:26:40

The natural gas industry represents

00:26:43

us pricing and just to

00:26:45

think about natural gas as

00:26:47

a much more localized price

00:26:49

and because it kind of

00:26:50

comes out the end of



00:26:50

a pipeline into a given

00:26:52

market and it can be

00:26:54

transported LNG. But as a

00:26:57

general rule, you're looking at

00:26:58

the price delivered in the

00:27:00

in the local market and

00:27:01

this is just focusing on

00:27:02

the Louisiana delivery Global because

00:27:07

of the delivery constraints price

00:27:10

best beat drops in half

00:27:11

for 2010 to 2020 that's

00:27:15

just due to the huge

00:27:16

amount of gas produced in



00:27:19
the US, but then you

00:27:23
see a decline in a

00:27:25
few. Of time. So if

00:27:26
you were evaluating a natural

00:27:30
gas and driven business in

00:27:33
20 2009 their very high

00:27:36
price point and wanted for

00:27:39
that amount you would have

00:27:40
suffered pretty well during the

00:27:42
decade from 2010 to 2020.

00:27:44
If not go bankrupt and

00:27:46
then you look and see

00:27:48
a spike again in it



00:27:51

after bottomed out during covid-19.

00:27:54

I demand and then you

00:27:57

see a spike up as

00:27:59

we see the war in

00:28:01

Ukraine and had a major

00:28:02

impact as you had two

00:28:05

things happening to you as

00:28:06

we had the one he

00:28:07

trained driving a demand for

00:28:09

LNG and a huge volume

00:28:12

of LNG plants coming online

00:28:13

in the US so I

00:28:14

could take that gas and



00:28:16

transport to where it's most

00:28:17

needed in Europe Beauty Supply.

00:28:20

interruptions in Europe in the

00:28:23

war Do you charge a

00:28:26

lithium? Lithium major ingredient in

00:28:31

car batteries in TVs and

00:28:35

as you can see the

00:28:38

market spiked up starting 2021

00:28:41

till 2020 to wear plateaued

00:28:46

and then despite to get

00:28:48

a late 2022 until I

00:28:51

crashed in 2023 and this

00:28:54

is really kind of a



00:28:56
classic both sides working here.

00:28:58
You have the Google Docs

00:29:01
and rate for electric vehicles

00:29:02
is slowed substantially in terms

00:29:05
of where they thought we'd

00:29:06
be and where we think

00:29:07
we're going as well as

00:29:09
big Minds coming on line

00:29:12
in China Brazil and Argentina.

00:29:15
So you're getting kind of

00:29:16
going in both directions. But

00:29:17
again if you were evaluating

00:29:20
a lithium mine in Yeah,



00:29:24

2022 let's say you got

00:29:26

a November 2020 to valuation

00:29:29

date. You looking back at

00:29:32

what's been a bubble in

00:29:35

the prior year and a

00:29:36

half and then that as

00:29:39

you know, 9 side has

00:29:40

collapsed. So Marcus should have

00:29:43

been his boss was this

00:29:44

in the recent terms really

00:29:46

challenged with evaluator to find?

00:29:50

What people are paying for

00:29:52

these assets they want to



00:29:53

look to see can you

00:29:53

see in the marketplace have

00:29:55

any lithium mines your changed

00:29:58

hands with the mark and

00:29:59

see what people are really

00:30:00

paying for it because the

00:30:01

risk to the buyer is

00:30:02

it that is not an

00:30:03

upward Trend thereafter or the

00:30:05

plateau doesn't stay because off

00:30:07

the cliff of Nissan 2023.

00:30:12

Every turn down to debt

00:30:13

and they are you going



00:30:14
to ask why if I

00:30:15
put dead in here with

00:30:16
these other Commodities. Well if

00:30:20
there's a price for money

00:30:21
and if you look back

00:30:23
in time back in the

00:30:24
eighties, you see that in

00:30:25
a 5-year treasury bond is

00:30:27
at 16% And then as

00:30:31
we go post potential crisis,

00:30:33
you look to see that

00:30:35
you and us treasury bond

00:30:36
basic average around 2. If



00:30:40

not below 2% So money

00:30:42

was really cheap and to

00:30:44

be able to get that

00:30:45

for financing deals as well

00:30:48

as refinancing projects. Look now

00:30:51

post covid with the spikes

00:30:55

receipt go back up or

00:30:56

is looking at it now

00:30:57

at about 5% at the

00:31:00

substantial different cost in a

00:31:03

project in terms of the

00:31:04

the cost of the debt

00:31:06

as well as it impacts



00:31:08

the discount rates for using

00:31:10

in terms of value of

00:31:11

project as well. See if

00:31:12

y'all go to the funds

00:31:13

were you saying if it's

00:31:14

costing that much more to

00:31:15

service the debt because it's

00:31:16

more expensive a lot of

00:31:18

lesser credits are not qualifying

00:31:20

for loans. So that's just

00:31:23

to give it an example

00:31:24

of a different commodity markets

00:31:26

and the hear the financial



00:31:29

Market an idea of how

00:31:32

volatile they are overtime both

00:31:35

reciprocal an event-driven and how

00:31:37

many things you need to

00:31:38

consider when evaluating search the

00:31:41

price in a model evaluation?

00:31:45

Okay, thank you Tim for

00:31:48

that comprehensive introduction to the

00:31:52

causes of it and apply

00:31:54

to man's technology development policy

00:31:58

and the end the financial

00:32:00

end of interesting. I would

00:32:03

like to follow up on



00:32:07

that now that we need

00:32:08

to have to be questioned

00:32:10

two siblings your bill. How

00:32:14

do you fracture all of

00:32:16

these elements in an evaluation

00:32:19

and maybe a DCF valuation

00:32:23

and how did they list

00:32:26

factors affect perhaps cash flow

00:32:29

analysis and the discount rate

00:32:31

calculation in the rain with

00:32:34

the end of the Earth

00:32:35

with but maybe perhaps a

00:32:37

little bit more detailed explanation



00:32:39

of them would be very

00:32:42

useful for us. You sure

00:32:44

I'm probably the first answer

00:32:45

is with great difficulty has

00:32:48

everyone who's been an expert

00:32:50

in these things looking at

00:32:51

Commodities markets and stuff. Is

00:32:53

it with great difficulty because

00:32:55

the world is not forecast

00:32:57

for Belen detail and you

00:33:00

know, we can say things

00:33:01

are cyclical but they're not

00:33:03

predictable if they were predictable.



00:33:05

I used to I spent

00:33:07

quite a number of years

00:33:08

of my life working on

00:33:09

Commodities trading for a big

00:33:10

Hedgehog and his predictable we

00:33:13

were to make money off

00:33:13

of it and you don't

00:33:15

always make money of course,

00:33:16

right? And that's with all

00:33:19

the best analysis all the

00:33:21

best technology all the best

00:33:23

will in the world if

00:33:25

things like oil prices copper



00:33:28

prices work without predictable. I'm

00:33:31

sorry, but I wouldn't be

00:33:32

sitting here today because I

00:33:33

probably would be flying on

00:33:35

my chest to some tropical

00:33:36

my own private truck. That's

00:33:43

the nature of commodity forecast

00:33:46

for any commodity is and

00:33:49

how to but how do

00:33:50

we still have to think

00:33:51

about things pretty rigorous? Right?

00:33:53

I mean that's the charge

00:33:55

is the Gavin honest answer



00:33:58

as best we can all

00:34:01

do it involves. Always a

00:34:04

level of uncertainty. So couple

00:34:07

of quick observation based on

00:34:08

temperatures will first often because

00:34:14

things change I mean I've

00:34:15

been involved in the case

00:34:16

and the natural gas World

00:34:18

analogy world and the road

00:34:20

and a question is is

00:34:22

it a little before or

00:34:25

a little after the war

00:34:27

in Ukraine? Wow. Change natural



00:34:30

gas prices in Europe extremely

00:34:33

dramatically even more than the

00:34:35

previous cuts and Russian production

00:34:38

to European Union. So, you

00:34:41

know, what date are we

00:34:42

talkin about changes the legitimate

00:34:45

expectation set off basically everyone

00:34:48

in the Market at that

00:34:49

time. Start a note are

00:34:53

generally these are charged that

00:34:55

are showing very short-term Spot

00:34:57

Price Rite what we call

00:34:59

front-month price in trading oil



00:35:02

for the next mom delivery

00:35:04

in the next month. We

00:35:06

do can take some Solace

00:35:07

that were many Commodities. There

00:35:10

are traded Futures prices. They

00:35:12

go out into the future

00:35:13

say for Brent crude for

00:35:16

Henry Hall bar. TTI natural

00:35:17

gas for WTI for many

00:35:20

Commodities copper so we can

00:35:22

look at those prices out

00:35:24

into the future which are

00:35:25

traded prices. And one thing



00:35:27

we do know from the

00:35:28

commodity and financial literature is

00:35:32

that typically there's something called

00:35:34

will be called the term

00:35:35

structure of volatility. Meaning of

00:35:37

stock prices are most volatile

00:35:38

and prices vary longer-term prices

00:35:43

change as well, but not

00:35:44

as much so we can

00:35:46

look at prices out into

00:35:48

the future. They have some

00:35:50

information. They don't have complete

00:35:52

information. But that is at



00:35:55

least it's for a weekend.

00:35:58

So a couple of things

00:35:59

over to your question where

00:36:01

do about how to think

00:36:01

about DC out than his

00:36:03

sort of the financially rigorous

00:36:05

way outside of my job.

00:36:08

I teach in the finance

00:36:09

department and I get yelled

00:36:11

at if people start throwing

00:36:13

around financial terms and it

00:36:15

in a relatively non-recourse way.

00:36:17

So the first thing is



00:36:19

we have to come up

00:36:20

with basic expected cash flows

00:36:24

and the classic challenge here

00:36:26

is okay that involve the

00:36:29

price for cars, but also

00:36:30

involve the business 40. I'm

00:36:34

going to have a set

00:36:36

of I'm going to drill

00:36:37

a set of gas Wells

00:36:40

offshore. Okay, and here's how

00:36:43

I think this is going

00:36:44

to play out. Okay, that's

00:36:46

nice. But what risks are



00:36:48

built into that because that

00:36:50

may be a best case.

00:36:52

I was everything goes perfectly.

00:36:54

I will be getting gas

00:36:55

out of my weld November

00:36:57

2020 If everything goes perfectly

00:37:00

I'll get this amount of

00:37:02

gas and then we have

00:37:03

to think about the price.

00:37:05

Well, how often does that

00:37:07

happen? Right we have to

00:37:09

account for that but to

00:37:11

do it correctly financially, we



00:37:13
can't just do that in

00:37:14
discount rates. We have to

00:37:15
think about the actual adjustments

00:37:17
to cash for because when

00:37:19
we think about in the

00:37:20
financial literate or everything to

00:37:23
do with valuation and stuff

00:37:24
there difference between systemic and

00:37:26
non systemic risks. Without turning

00:37:31
this into a finance class,

00:37:33
but under the capital asset

00:37:35
pricing model. We have to

00:37:36
think about things that are



00:37:38
idiosyncratic the cash flow has

00:37:41
to do with my project

00:37:41
and then in thinking about

00:37:44
discounting we have to think

00:37:45
about how were those risks

00:37:47
related to changes in Market

00:37:49
risks as a whole. Okay,

00:37:52
so are basic formula for

00:37:55
doing that, you know, two

00:37:58
minutes is come up with

00:38:00
this good ass out of

00:38:01
expected cash flows as you

00:38:03
can accounting for all of



00:38:06

the idiosyncratic risk is is

00:38:09

his Tim's cell project going

00:38:12

to go into service when

00:38:13

he thinks it is what

00:38:15

kind of problems are there

00:38:16

blah, blah blah, and then

00:38:18

we have to think about

00:38:19

discounting those which is the

00:38:21

relationship between those expected returns

00:38:24

and expected market returns. Okay,

00:38:27

so why we do have

00:38:28

with you if you can

00:38:31

it's best not to just



00:38:33

say, oh, we have a

00:38:34

lot of risk. We're going

00:38:35

to play a super high

00:38:36

discount rate. We should have

00:38:37

applied. We should apply the

00:38:39

very of the variation in

00:38:41

Risk into the cash flows

00:38:43

as we see it this

00:38:45

vile thing. I'll make a

00:38:46

point to is going back

00:38:48

to all forecast for Law

00:38:50

and every scenario that relies

00:38:54

on a single forecast is



00:38:56
inaccurate. Now, sometimes we have

00:38:59
to have a single scenario.

00:39:00
We have to come up

00:39:01
for a number but anyone

00:39:04
who's actually worth in a

00:39:05
kind of commercial side of

00:39:07
advising on projects realize it's

00:39:10
been almost no commercial Enterprise

00:39:12
undertakes a hundred million dollar

00:39:16
or a 5 billion dollar

00:39:17
investment project around one price

00:39:20
scenario if it's possible think

00:39:23
about different outcomes, which are



00:39:26

Effectively scenarios of the world

00:39:29

outside of the control with

00:39:31

the investor right that are

00:39:34

going to offenses and there

00:39:36

are skate. There are cases

00:39:37

where the project may do

00:39:39

great since project may do

00:39:42

great despite the fact he's

00:39:43

doing exactly the same thing

00:39:44

across those scenarios. He didn't

00:39:47

start the war in Ukraine,

00:39:47

right? The price of gas

00:39:50

goes up. He does really



00:39:52

well. There's some huge gas

00:39:55

find somewhere else that no

00:39:56

one predicted. No one predicted

00:39:58

the Shale Revolution Marsh in

00:40:00

the United States if they

00:40:02

had there would have been

00:40:03

large oil companies that would

00:40:05

have saved or made billions

00:40:07

of dollars, right? It can't

00:40:09

be predicted in detail. So

00:40:11

you have to think about

00:40:12

the range of possible outcomes

00:40:14

in order to really logically



00:40:17

do a decent job. Now

00:40:27

that I discovered that it

00:40:29

has worked in the Wallace.

00:40:30

I think I want to

00:40:32

understand how Wallace treat people

00:40:36

look similar or there may

00:40:38

be other method rules of

00:40:39

conduct that use traffic price

00:40:42

for a New York volatile

00:40:43

projects to be here my

00:40:51

first of Washington arbitration week.

00:40:54

I have to preface my

00:40:55

comments by saying that there



00:40:57

is like my past experience

00:40:58

did not reflect Cornerstone Church

00:41:03

used or use of its

00:41:04

clients of course of action

00:41:15

by Tim 20-30 years multiple

00:41:19

Commodities went through multiple cycles,

00:41:21

and sometimes it can be

00:41:23

very vicious. And Trust so

00:41:29

what do we typically do

00:41:31

when Wall Street so the

00:41:32

analysts and maybe I'll use

00:41:39

that as an illustration. So

00:41:50

Royal Australian \$140 a barrel



00:42:06

on Wall Street, you wouldn't

00:42:09

be valuing the company at

00:42:11

swimming. That spot price continues

00:42:14

into so what you're trying

00:42:16

to do is the next

00:42:17

couple years. You're trying to

00:42:19

build an explicit. Orica's Maybe

00:42:21

by using Cora curves. If

00:42:23

it is a liquid commodity

00:42:25

there is a real for

00:42:26

real sometimes and then you'll

00:42:30

see you but then I

00:42:39

realized price of mid cycle



00:42:41

price where supply-demand balance is

00:42:43

up. So when you were

00:42:45

sitting here at \$140 to

00:42:47

debate on Wall Street was

00:42:49

isn't that allowed at \$190

00:42:53

per barrel and different people

00:42:56

have different views made and

00:42:58

to figure out that number

00:43:00

you were trying to figure

00:43:01

out how quick claim for

00:43:03

example of the Shale development

00:43:04

can take home how much

00:43:07

money is available different private



00:43:09

Equity firms who can Finance

00:43:10

the development how quickly the

00:43:12

new production will come on

00:43:14

board. How much is a

00:43:15

new production will come on

00:43:17

board what will happen to

00:43:18

demand in the meantime to

00:43:20

absorb it and if an

00:43:22

analyst were trying to build

00:43:24

all these different supplies man

00:43:25

models trying to figure out

00:43:26

what point does the pie

00:43:28

Mash demand is an increase



00:43:30

in Supply in there for

00:43:32

a gradual decline in price.

00:43:33

And if you look at

00:43:36

the analyst reports, you would

00:43:38

see it sometimes even on

00:43:39

the front page they would

00:43:41

have a table that has

00:43:42

a forecast for revenue and

00:43:43

earnings and sometimes it will

00:43:47

have the underlying commodity price

00:43:48

and it would have several

00:43:49

years if it's supposed to

00:43:50

And then there would be



00:43:52

the last column which would

00:43:54

say it's kind of a

00:43:54

mid-cycle normalize price and you

00:43:56

can see what price for

00:43:58

commodity analyst was Miley Cyrus's

00:44:04

JPMorgan and there's Market. I

00:44:07

just asked her and said

00:44:08

nobody knows everybody and the

00:44:15

reasoning behind the fact that

00:44:19

you think that the markets

00:44:21

going to normalize is that

00:44:22

when you have really high

00:44:25

prices at the peaks of



00:44:26

the company is a generating

00:44:27

very attractive margins, very attractive

00:44:30

Returns on Capital. So the

00:44:31

stimulation of the new oil

00:44:37

wells will be because it

00:44:41

produces will be trying to

00:44:42

capture those profits at some

00:44:45

point. There's enough capacity. If

00:44:47

a dump when the man

00:44:48

drops then suddenly your face.

00:44:50

Excess capacity the price is

00:44:53

the price then goes to

00:44:55

a level where the marginal



00:44:57

producers somebody visitor has its

00:45:00

charms known as cost producers

00:45:03

in the world or in

00:45:04

that region that ranked in

00:45:05

terms of their operating production

00:45:07

cost and so producers for

00:45:09

the highest cost and now

00:45:11

starting to be in trouble.

00:45:13

So maybe they're break even

00:45:15

and then they start losing

00:45:15

money and then depending on

00:45:17

how much they losing it

00:45:18

with the cost of clothes.



00:45:20

They might be shutting down

00:45:21

capacity. They might be shutting

00:45:23

down mine production and then

00:45:26

with having reduced capacity you

00:45:29

now again going back into

00:45:31

balance. And so when you

00:45:34

doing a DCF as I

00:45:36

mentioned you would be looking

00:45:36

at it. Maybe it's supposed

00:45:37

to pour this year's been

00:45:39

pouring her and then you

00:45:41

will do that model that

00:45:44

will show a gradual move



00:45:46

towards the mid cycle price

00:45:47

and you would use that

00:45:48

type of prize which is

00:45:50

better. Fart against returning Capital

00:45:53

you're going to try to

00:45:54

figure out what Bree turn

00:45:55

castle that would imply for

00:45:56

the industry and you can

00:45:58

use that as a measure

00:46:01

of pricing and stay out

00:46:03

of years and then to

00:46:04

use that in the terminals

00:46:05

out so I can 140



00:46:08

spices and putting God into

00:46:16

that model. So then another

00:46:21

thing that is important to

00:46:24

bear in mind when you

00:46:26

look in the cyclical companies

00:46:28

is their ability to survive

00:46:30

through this site called and

00:46:33

Associates of Highly volatile companies

00:46:35

for sale since 2008 after

00:46:37

the crisis. Everybody was looking

00:46:39

at the abilities of the

00:46:40

companies to survive and will

00:46:42

and it did this normalize



00:46:44

volume as well as Ben

00:46:46

we would try and a

00:46:47

number of scenarios thinking at

00:46:48

what commodity price will that

00:46:50

comes and goes bye-bye. Do

00:46:52

you really look very carefully

00:46:53

through their liquidity situation can

00:46:58

it survive in the market

00:47:02

and go before Things Fall

00:47:03

Apart? And then I suggest

00:47:06

if I mean, this is

00:47:09

something that should be taken

00:47:11

into consideration because I sometimes



00:47:14

I just need anything from

00:47:15

savings paying bills without the

00:47:16

balance sheet and cash flow

00:47:18

analysis and out. Encourage or

00:47:22

cyclical companies to find a

00:47:24

run through the whole gamut

00:47:25

and see if the company

00:47:27

on to various scenarios, which

00:47:29

is still could be around

00:47:30

the hospitality is still visible

00:47:33

and still operating. Then if

00:47:37

we turn to another while

00:47:38

you smell that's message. When



00:47:40

is the volume of multiples

00:47:42

which I kind of uses

00:47:43

a quick hand. That's all

00:47:45

you Jason if you again

00:47:47

if you said \$140 oil

00:47:50

and there's a lot of

00:47:52

companies generate at that level.

00:47:53

Then you think you would

00:47:56

either but I'm also you're

00:47:58

going to put on that.

00:47:58

Do you really have to

00:48:00

understand where in the cycle

00:48:02

you are whether you're in



00:48:03

the peak and trough and

00:48:04

Med and the multiples change.

00:48:06

So at the peak when

00:48:08

you have high BW multiple,

00:48:10

then when you are in

00:48:14

the bottom at the trust

00:48:16

that we can put the

00:48:17

peak and I'm not talking

00:48:19

specifically to an industry, but

00:48:21

you may have a teeth

00:48:22

multiple AIDS, but you may

00:48:24

have a truck multiple of

00:48:25

18, so I guess you



00:48:29

need to understand where you

00:48:30

are with multiple. Do you

00:48:31

reply another consideration? I would

00:48:37

put their is that we've

00:48:38

been talkin about Commodities Tyler's

00:48:41

companies with Marty sellers. You

00:48:43

need to think about companies

00:48:45

Road Commodities or a big

00:48:46

input and what that implies

00:48:48

for those companies whether they're

00:48:51

able to pass through into

00:48:53

cost increases are not where

00:48:55

they have to eat up



00:48:56

into cost increases for example,

00:48:58

as a company that's making

00:48:59

making tractors and still is

00:49:04

a big pencil and a

00:49:05

Stihl price goes up dramatically

00:49:07

what happens to that company's

00:49:09

margins. You have two things

00:49:12

from many aspects and you

00:49:14

really need to understand the

00:49:15

business has to do before

00:49:16

casting starting each mortgage company

00:49:19

can be in the unique

00:49:20

position. It has the role



00:49:22

of vitamins and their own

00:49:24

abilities. And whatever company dealing

00:49:31

with you really need to

00:49:32

understand the business model to

00:49:33

be able to look under

00:49:34

the hood of the market.

00:49:36

I know that company is

00:49:41

fitter for this explanation, which

00:49:45

kind of give us another

00:49:46

perspective about this phenomenal and

00:49:48

how it works in practice

00:49:50

from a valuation experts magistrate

00:49:54

Wallace Street from the perspective



00:49:56

of a lawyer. I like

00:49:58

now to turn back again

00:50:00

to Natalia unit because the

00:50:03

reason that I'm asking now

00:50:04

we have no be no

00:50:05

all this causes a price

00:50:07

for life cycles how they

00:50:10

work and one thing that

00:50:12

strikes me is that The

00:50:15

fact that price volatility exist

00:50:17

everybody always happen, what's up

00:50:28

and down which makes me

00:50:30

think we are lawyers usually



00:50:32

come up with some make

00:50:33

an ism to do with

00:50:35

this thing. I like want

00:50:37

to ask Maria Natalia to

00:50:39

tell us a little bit

00:50:42

about that. You can explain

00:50:44

whether they're in such mechanism

00:50:46

in contracts in the wall

00:50:48

to throw that could kind

00:50:49

of helped general rule of

00:50:55

thumb is staying as particularly

00:51:04

applicable in this County. I

00:51:06

mean Close 53 off and



00:51:16

lights. Are you end up

00:51:17

thinking about when entering the

00:51:28

long-term contract specifically price review

00:51:31

mechanism by which as the

00:51:32

name suggests allow the life

00:51:35

of the contract for the

00:51:36

parties through the price of

00:51:39

the price calculation depending on

00:51:41

certain on changing market conditions.

00:51:43

And this is something that

00:51:45

between definitely a lot more

00:51:47

popular and and the party

00:51:49

started Incorporated. That's Steve guard



00:51:52
into the long-term contract, especially

00:51:55
after the Shale gas Revolution

00:51:56
that overthrew generally refer provide

00:52:04
a procedure that will be

00:52:06
triggered by certain events or

00:52:08
other Market condition parties companies

00:52:11
provide for flexibility. What kind

00:52:13
of trigger Events will allow

00:52:16
for such laws to to

00:52:19
pretend by Beatrice party. Sometimes

00:52:21
want to provide themselves for

00:52:23
the flexibility that also causes

00:52:25
the triggering event itself to



00:52:28

be ambiguous. Like how how

00:52:29

radical the change in the

00:52:31

market has to be for

00:52:33

the parties be able to

00:52:34

renegotiate the price of Canby

00:52:37

Canby the student. That's why

00:52:39

it's really important to purposely

00:52:41

try and surprise review mechanism

00:52:43

and and Define define the

00:52:46

triggering event so that when

00:52:48

it happens if parties have

00:52:50

that option when it happens

00:52:52

at parties usually try to



00:52:53

negotiate price and I'll be

00:52:54

at that point. There's already

00:52:56

attention because one party potentially

00:52:59

will you no benefit more

00:53:02

from the changing market conditions

00:53:03

in theaters. And when the

00:53:06

police cannot reach an agreement

00:53:08

as to revision of the

00:53:09

price of Riley translation that

00:53:11

dispute will then end up

00:53:13

in arbitration. Where is arbitration

00:53:16

arbitrator as well. I sent

00:53:18

you revise the price of



00:53:21

the price calculation for the

00:53:24

linkage for a great event

00:53:25

such as significant price of

00:53:30

the commodity. So they are

00:53:39

there specific commitments by the

00:53:43

state which are designed to

00:53:45

Shield foreign investors on the

00:53:47

political risk in particular subsequent

00:53:50

adverse legislative or regulatory changes,

00:53:53

which also can have a

00:53:54

significant impact on the prices

00:53:56

of Commodities and one example

00:53:59

would be all so freaking



00:54:03
slow. Freeze the domestic legislation

00:54:08
or regulations for the term

00:54:11
of the investment at the

00:54:12
team at the time of

00:54:13
the agreement. So under the

00:54:15
legislation adopted at the time

00:54:18
of the agreement will not

00:54:19
apply to that store and

00:54:21
foreign investor investors and a

00:54:23
project for example in a

00:54:25
higher olive oil prices from

00:54:31
the host government to raise

00:54:33
taxes or perhaps an ad



00:54:35
windfall profit tax the freezing

00:54:37
Claus in that example my

00:54:38
help to shoot investors from

00:54:40
Todd and investors to take

00:54:42
advantage of the high oil

00:54:43
prices and such so very

00:54:54
often now, they kind of

00:54:55
are more in the form

00:54:56
of economic equality closets which

00:55:00
are similar to the price

00:55:03
price review mechanism. Where the

00:55:05
party is the state in

00:55:06
the front investors will just



00:55:08

sprinted go she ate there

00:55:10

at the contract and the

00:55:11

terms based on what's what's

00:55:13

happening in the market and

00:55:15

finally we still have unicorn

00:55:19

Smasher and hardship closet switch

00:55:21

now especially after covid are

00:55:23

almost, you know, always always

00:55:26

contemplated as this party's enter

00:55:28

into contracts right now, depending

00:55:31

on how do you draft?

00:55:31

It is sometimes allow the

00:55:33

parties to completely to completely



00:55:36

view relief from performance or

00:55:39

sometimes they'll just allowed to

00:55:40

Party Store renegotiate the terms

00:55:43

of the contract applicable law

00:55:47

will provide for for a

00:55:51

remedy for under New York

00:55:53

law frustration of purpose will

00:55:56

automatically be applied to the

00:55:58

contract to the country to

00:55:59

send it under that log,

00:56:00

but it's not always so

00:56:02

I would say Given what

00:56:07

we learn now, and we



00:56:08
know how unexpected the futurist

00:56:12
and we really cannot for

00:56:13
Dad. He been assessed as

00:56:15
much as we wish there.

00:56:16
Like we cannot really put

00:56:17
it where we don't end

00:56:18
up. The best measure is

00:56:19
still like really prepare for

00:56:21
the worst and and truthfully

00:56:23
draft that contractual mechanism that

00:56:25
would allow the parties to

00:56:26
either adjust adjust a performance

00:56:30
adjusted terms of the contract



00:56:31
before before. You know, what

00:56:36
the score of the drug

00:56:37
really really hot? Thank you.

00:56:41
I told you 4 if

00:56:43
so, I just kind of

00:56:45
completes our coverage of the

00:56:47
relevant legal principles of planning

00:56:51
to move to some more

00:56:53
specific questions. If the panel

00:56:55
is already I think that's

00:56:57
kind of a picture of

00:56:59
the general ideas and the

00:57:02
legal principle, but what I



00:57:04

want to do, I just

00:57:06

want to feel a little

00:57:07

for the panel our economy

00:57:09

may be to comment on

00:57:14

Some example of project expansion

00:57:17

optional maybe seabron to want

00:57:19

to comment on that that

00:57:21

how would that work in

00:57:23

the energy industrial and gas

00:57:26

straps are renewable and how

00:57:29

does price for the activity

00:57:32

may have sex valuation in

00:57:34

those specific scenarios? When a



00:57:36
project as a combustion engine

00:57:39
option of the project into

00:57:41
the future? This is really,

00:57:44
I'm not just in the

00:57:45
oil and gas and Mining

00:57:46
all kinds of on primary

00:57:49
Industries for example, and in

00:57:52
the end it's really a

00:57:53
offered in an arbitration. I'm

00:57:56
so I'm going back to

00:57:59
Tim is his oil magnate

00:58:01
here. He wants to he's

00:58:02
going to drill some oil



00:58:04
wells. Okay in a specific

00:58:06
area of the field. Maybe

00:58:08
he has big blocks of

00:58:09
land, you know, he's leased

00:58:12
to drill. He's going to

00:58:14
drill some oil. Oh, okay.

00:58:16
That's like our phone call

00:58:18
that are Star are kind

00:58:19
of starter project. Right but

00:58:22
he has more land available

00:58:24
than that initial said well,

00:58:26
maybe the other roles are

00:58:28
a little higher, So he's



00:58:30

going to start with the

00:58:31

initial set, but if prices

00:58:34

go higher in the future,

00:58:37

You know, the price prices

00:58:38

can change over the future.

00:58:39

They might they might go

00:58:41

higher than Michael or if

00:58:43

they're higher he can start

00:58:45

to drill out more of

00:58:46

that land for a lot

00:58:47

more of that acreage and

00:58:48

produce more oil profitably if

00:58:52

price is gold. He might



00:58:54

not want to do that.

00:58:55

Those oil those new knows

00:58:57

that second set of Wells

00:58:59

might not be advantageous for

00:59:01

him and given that he

00:59:04

can wait a while. He

00:59:05

can decide not to drill

00:59:08

that second set which reduces

00:59:11

his investment costs horse races

00:59:13

his return so I can

00:59:16

automatically that's what we call

00:59:17

a real option meaning. It's

00:59:19

it's an option unlike a



00:59:21
traded Financial option. It's an

00:59:23
option that we exercise Drew

00:59:26
doing something in the real

00:59:27
world and this case making

00:59:29
a new investment and sending

00:59:30
people out to drill holes

00:59:32
in the ground, but in

00:59:34
many cases primary Oil gas

00:59:38
mining other commodity type things

00:59:40
people have an investment program

00:59:43
that embodies auction hours, right

00:59:47
and the cars whether I

00:59:49
need weather weather Detroit's to



00:59:52

decide to invest in that

00:59:54

case depends on the prices

00:59:56

that we see out into

00:59:57

the future that adds potential

01:00:00

substantial value. And that's the

01:00:02

type of thing we're off

01:00:03

and looking at is if

01:00:06

there's an expansion option, you

01:00:08

know, if if if there's

01:00:11

a breach early on did

01:00:13

it not only affect the

01:00:15

potential kind of starter project

01:00:17

the initial set of the



01:00:18

Investments the initial set of

01:00:20

wheel wells, but did it

01:00:21

affect the ability to go

01:00:23

ahead had prices turned out

01:00:25

high for which there was

01:00:27

some probability of of eliminating.

01:00:30

Too and that is a

01:00:32

real loss of value and

01:00:35

then probably people in peoples

01:00:37

Actual commercial operating plans will

01:00:41

Encompass that optionality when they

01:00:43

think about getting into the

01:00:45

even for the early stages



01:00:47

of leasing the land to

01:00:48

make an investment. They won't

01:00:50

be maybe considering different stages

01:00:52

of that. It's a rational

01:00:54

thing to do. That's how

01:00:55

it will accompany kind of

01:00:56

undertakes its capital budgeting process.

01:01:00

So that isn't a significant

01:01:03

area of Potential loss again.

01:01:08

It's based on expectations of

01:01:11

different outcomes of prices and

01:01:14

what Peep and what costs

01:01:16

and profits will be introduced



01:01:17
to so again, it's still

01:01:19
not an easy analysis to

01:01:21
do but it's not something

01:01:22
that one can Thank you

01:01:26
what I wanted but follow

01:01:28
up on me if it's

01:01:29
probably better if you tell

01:01:31
us about the same height

01:01:33
works in the mining sector

01:01:34
and its effect on various

01:01:37
topics of the truck. So

01:01:42
if you think about this

01:01:44
oil field help you well,



01:01:48

you really have time to

01:01:50

send the business again. So

01:01:51

and you as he mention

01:01:54

you need to think about

01:01:54

the cost of educating on.

01:01:57

Option razor for somebody if

01:01:58

you were small trailer and

01:02:01

you don't own sufficient, please

01:02:03

cuz he needs best hole

01:02:04

drilling Fleet. Can you rent

01:02:06

a wheel close? They are

01:02:07

going to be renting is

01:02:08

it going to be available?



01:02:09

Are there going to be

01:02:10

people available to drill? Because

01:02:12

if you're in that position

01:02:13

your neighbors in the same,

01:02:14

so everybody in the areas

01:02:16

in the brain, so can

01:02:19

you to carefully Thanks through

01:02:25

the business I keep going

01:02:26

back. Are you have to

01:02:27

understand the business? So in

01:02:29

the mining industry, typically you

01:02:33

also have to think very

01:02:34

carefully about the timing what



01:02:37
is possible what is not

01:02:38
and how long it takes.

01:02:39
So for some point if

01:02:41
you have a license or

01:02:43
mine, there are certain conditions

01:02:44
under which I could you

01:02:46
have mine for 5 years

01:02:47
that license can be withdrawn.

01:02:48
Maybe you have that maybe

01:02:52
you don't you have to

01:02:53
understand it. Let's say you

01:02:56
have the license for 10

01:02:58
years. You can still kind



01:02:59

of sit there and wait

01:03:00

when you drink in line,

01:03:03

let's have dinner in iron

01:03:04

ore mine. You don't just

01:03:05

dig the dirt from the

01:03:06

drugs. It has to be

01:03:07

trossa store multiple facilities to

01:03:10

to build his facilities in

01:03:12

the first place depending on

01:03:14

how big of a processing

01:03:16

plants you want. It can

01:03:18

be several hundred million dollars

01:03:19

by to double the capacity.



01:03:21

You can bring it in

01:03:23

the beginning when you build

01:03:24

a Do you have to

01:03:25

know how big you wanted

01:03:26

to be? So if you

01:03:28

want to double it is

01:03:30

going to cost you. I

01:03:31

don't know. Maybe just add

01:03:32

some more to build right

01:03:34

so it's not like five

01:03:35

years down the road and

01:03:37

the I know price then

01:03:38

I threw the roof you



01:03:39

can go and do the

01:03:40

second row seating plan it

01:03:42

even if you decide to

01:03:44

do that, it's going to

01:03:45

be very costly and it

01:03:46

will take you a few

01:03:47

years to do. So by

01:03:49

the time you're done with

01:03:50

it the price for my

01:03:52

already have come down. If

01:03:54

so kind of goes back

01:03:56

to real understanding what they

01:03:59

often is how long it



01:04:01

takes for the costs are

01:04:02

involved. What are the competitors

01:04:04

are going to be doing?

01:04:05

Maybe somebody is sitting on

01:04:06

the cheap I nor mine

01:04:08

and Australia where they don't

01:04:09

have to go through this

01:04:10

protesting and they're doing fine.

01:04:11

So I know where which

01:04:14

is her class. I just

01:04:15

froze his name Devin be

01:04:16

the first ones to that

01:04:17

at high prices Again by



01:04:19
the time you do your

01:04:21
American line with extra capacity.

01:04:25
I see you have to

01:04:27
go back and understand that

01:04:28
thank you and best wishes

01:04:37
and those are startups in

01:04:41
white panel. If anybody has

01:04:45
any comment on the situation

01:04:47
of a starter wear for

01:04:48
example the startups that's their

01:04:51
main business model is old

01:04:54
gas gold something and how

01:04:56
it how would you go



01:04:57

about that to kind of

01:05:00

come up with that for

01:05:01

her graduation approach if you

01:05:04

will. Well, there's also two

01:05:10

different kinds of startups where

01:05:11

you got in a certain

01:05:13

time to 11 investor that

01:05:14

has the right to do

01:05:16

something with no experience in

01:05:18

the field. I somehow got

01:05:20

the concession they're inexperienced and

01:05:23

they may have nothing other

01:05:24

than they've gotten the permit.



01:05:26

They don't have a feasibility

01:05:28

study. They don't have any

01:05:29

financing at Advance the project

01:05:31

they don't have any real

01:05:32

personnel as if one end

01:05:35

of the spectrum Spectrum, as

01:05:37

you may have experienced operator

01:05:39

who has a start-up project

01:05:41

where they have done some

01:05:43

of that work to start

01:05:45

to understand what are the

01:05:46

economics of the project and

01:05:48

they've gotten some of the



01:05:49
regulatory approvals after the first

01:05:51
permit to move it to

01:05:53
2 to advance their rights

01:05:54
to or reproduction license, which

01:05:57
makes a big difference in

01:05:58
terms of advancement project to

01:06:00
get it closer to when

01:06:01
they might be real cash

01:06:01
flows is a real problem

01:06:03
with a lot of these

01:06:04
basic Industries is Get put

01:06:07
down hundreds of millions of

01:06:10
dollars in De cero once



01:06:13
you start. I can see

01:06:15
cash for a long. Of

01:06:17
time. And if you don't

01:06:19
have a advance plan when

01:06:21
you're trying to we were

01:06:23
you have a valuation date

01:06:24
very difficult to do and

01:06:27
today surgery to it without

01:06:29
going in and doing all

01:06:31
the additional work later. It's

01:06:32
a buyer would have to

01:06:33
do drugs. They were in

01:06:35
your shoes and you have



01:06:36
to give no plans. So

01:06:38
early early stage ones have

01:06:41
very limited value cuz they

01:06:42
haven't done the work to

01:06:44
advance and Beyond contractual right

01:06:45
even if their experience that

01:06:49
would be there. Experience there's

01:06:52
potentially some chance of a

01:06:55
lie, but if they haven't

01:06:56
done anything to advance the

01:06:58
project is what I'm really

01:07:00
going to do. Is it

01:07:01
going to be a 220



01:07:02
million per year processing plant

01:07:06
legal aspects related to establish

01:07:29
the probability of profit and

01:07:31
more comfortable. The tribunal is

01:07:34
going to be awarding spatulas

01:07:36
profit and ask them exactly

01:07:37
sad like a start-up is

01:07:39
not equal to start up.

01:07:40
So at a startup with

01:07:42
established with agreements with customers

01:07:46
already in in a field

01:07:48
of like Commodities that it's

01:07:50
a sort of Recognize that



01:07:53

it's very going to be

01:07:56

a very different start up

01:07:57

from like a technology startup

01:07:59

or you know, you have

01:08:01

and use ictchnology where you

01:08:03

don't even know the market

01:08:04

or I'd swear you have

01:08:05

any experienced investor. So in

01:08:09

general from from a legal

01:08:11

perspective will just try to

01:08:14

see what is the evidence

01:08:19

that supporting according to the

01:08:21

prophet. That's our start-up would



01:08:23

be generating and it's really

01:08:25

a taste of the more

01:08:27

there is to support such,

01:08:30

you know consultation the more

01:08:32

likely it is going to

01:08:33

be that much time. It

01:08:35

is going to be able

01:08:37

to overcome the objections of

01:08:40

the damages are merely speculative.

01:08:43

Thank you for the way

01:08:44

we have been going for

01:08:45

an hour and 5 minutes.

01:08:46

I would like to I



01:08:48
need your help. We can

01:08:49
discuss more and more and

01:08:50
I think I want to

01:08:51
open it to the questions

01:08:52
if the audience have to

01:08:54
give it a few minutes

01:08:55
to the audience to ask

01:08:57
questions. 1 they are all

01:09:14
ready for you can keep

01:09:21
all the arbitrator's to evaluate

01:09:27
today losses in such investment

01:09:31
disputes. Call Doctor to review

01:09:39
Des Plaines Honda. What factors



01:09:41

do they are considering when

01:09:44

making the final decision since

01:09:49

for a question on one

01:09:52

and it really just depends

01:09:54

on the number of of

01:09:55

a factors and know that

01:09:57

the number one the first

01:09:58

issue that you have to

01:09:59

think what is devaluation Big

01:10:01

ride because it depends where

01:10:04

weather devaluation day. It is

01:10:05

going to be nappy throwing

01:10:07

their Valley. It will make



01:10:08

a huge huge difference. If

01:10:09

you know, we will be

01:10:11

evaluating lithium in 2018 versus

01:10:14

2022. I think it was

01:10:16

under the if it's commercial

01:10:25

arbitration. What is the law

01:10:27

for Cabool to to to

01:10:28

The District in investment in

01:10:31

investor-state arbitration? There will be

01:10:33

no depend on whether there

01:10:35

was unlawful. Expropriation or what

01:10:37

does a lhasa apso lhasa

01:10:40

distribution? So in that case



01:10:42
in general that will be

01:10:44
like the moment of the

01:10:45
bridge. So once you have

01:10:47
when you look at the

01:10:48
specific moment in in in

01:10:50
time on the on the

01:10:51
recall the grass that we

01:10:54
saw the one line and

01:10:56
then you will have to

01:10:57
sing what it cost in

01:11:02
the past all of that

01:11:03
then we just want to

01:11:04
try and that's that the



01:11:06

investor and heard but you

01:11:08

know estimating the future cash

01:11:11

flows at. It's retarded. It's

01:11:13

it's a tricky business and

01:11:15

end of more set of

01:11:15

evidence you have depending on

01:11:17

whether just being already ongoing

01:11:19

operation that's been generating profits.

01:11:22

And what was the expectation

01:11:23

and that moment in time

01:11:25

moving forward that this business

01:11:28

will be generating if it

01:11:29

is to start up with



01:11:31
any established operations and an

01:11:34
agreement with What's a lot

01:11:36
of unknown that will you

01:11:38
know that will be a

01:11:40
lot more problematic for the

01:11:41
tribunal to to a word

01:11:43
such damages because they might

01:11:45
consider them jumping speculative. So

01:11:48
I think they're just a

01:11:52
lot of it's it's a

01:11:54
very complex. It's a very

01:11:56
complex process. That's why we

01:11:58
like to higher valuation expertflyer



01:12:01

and they will usually come

01:12:05

up with them at the

01:12:06

dollar Gees to you know,

01:12:08

that's the highest volume possible

01:12:09

and the other side is

01:12:11

going to hire a valuation

01:12:12

expert and Belgium are you

01:12:15

know completely different one and

01:12:21

and the tribunal will both

01:12:24

of them how you know

01:12:25

each other what assumptions were

01:12:27

made about the future it

01:12:28

what how much evidence was



01:12:30
there to support you no

01:12:32
future. cash flows and decision

01:12:38
which I don't envy she

01:12:51
can thank you end up.

01:12:55
One to question one is

01:12:59
our price. Google price volatility.

01:13:05
Are they a new phenomenon

01:13:10
or are we seeing or

01:13:14
are we simply seeing something

01:13:16
that has always been there?

01:13:17
But we're we're seeing it

01:13:20
closely or closer now and

01:13:23
the end of the second



01:13:25

question would be on Natalya's

01:13:27

references to some contractual possibilities

01:13:31

to review prices at cetera

01:13:33

Are there specific mechanisms are

01:13:36

there? Eagle at war or

01:13:41

financial that that you could

01:13:44

use in a valuation model

01:13:48

2 account for greater stability

01:13:59

of of of those price

01:14:01

hikes and you can see

01:14:02

me that that that it's

01:14:04

it's literally random the work

01:14:07

where you are when the



01:14:08

bridge was made and where

01:14:10

you are where you went

01:14:13

when the the award comes

01:14:18

out depending on whether it's

01:14:19

a law for a lost

01:14:21

like four patients that are

01:14:23

their mechanisms that you could

01:14:24

say. Well we don't have

01:14:27

this magic ball, but we

01:14:29

have a mechanism to generally

01:14:34

Take into account a more

01:14:36

stable behavior of the prices

01:14:38

or are we simply know



01:14:40
at the stake of of

01:14:41
of unpredictability? I wish I

01:14:51
knew a magic mechanism. I

01:14:53
think if we all that

01:14:54
had a magic mechanism we

01:14:55
probably would have been using

01:14:56
it by now a first

01:14:58
time at the volatility is

01:15:00
not new. It's probably more

01:15:02
observable in the financial ization

01:15:05
of a lot of commodity

01:15:07
Market that products are traded

01:15:09
in markets for which there's



01:15:11

published prices. We can look

01:15:13

up be running away on

01:15:16

her Bloomberg screen, but you

01:15:19

know, there's always been just

01:15:20

play Just we'll probably not

01:15:23

quite so I'm to hear

01:15:26

one thing about the mechanisms

01:15:27

on a movie with some

01:15:28

of it maybe was in

01:15:29

my questions about in calculation

01:15:31

of Damages. You going to

01:15:32

the questions that not even

01:15:33

speaking about in terms of



01:15:34
the creation of stabilization mechanisms

01:15:39
in contracts the classic when

01:15:40
is indexation You mentioned a

01:15:42
price review mechanism, which is

01:15:44
pretty heavily used in the

01:15:46
gas and LNG world. For

01:15:48
example, which does okay, we're

01:15:51
going to have triggers where

01:15:52
we're going to say. Okay,

01:15:54
the price is not the

01:15:55
whole price isn't a good

01:15:57
price anymore. We can have

01:15:59
a panels coming in to



01:16:00

set a new price based

01:16:02

on on some criteria. The

01:16:04

other classic thing in many

01:16:05

many cases is that we

01:16:07

have indexation contracts. So, you

01:16:10

know many many contracts that

01:16:12

are are priced against somewhat

01:16:15

or basket of parallel Commodities,

01:16:19

you know gas that may

01:16:21

be traded somewhere very remote

01:16:24

from Europe or the United

01:16:27

States. Usually Europe may be

01:16:30

tied to ttf prices which



01:16:32

are actually in the nether.

01:16:34

Many Commodities are tied to

01:16:36

oil prices just because well

01:16:39

there's our lives there is

01:16:41

correlation in commodity prices due

01:16:45

to changes in the global

01:16:46

economy. Many things are traded

01:16:49

with her somehow index partially

01:16:51

at least two things like

01:16:53

Consumer Price indices Brent crude

01:16:56

prices, which are not those

01:16:59

Commodities, but it does give

01:17:02

some way for the price



01:17:03

to evolve. However imperfectly however,

01:17:08

that may be that the

01:17:09

deal that the parties agreed

01:17:12

to at the top. That's

01:17:14

all they said it. That's

01:17:15

what they like. white light

01:17:31

My name is a rock

01:17:45

music station on Applebee award.

01:17:57

What if things turn around

01:17:59

and in time get back

01:18:01

to go to the longer-term

01:18:02

thing that we saw two?

01:18:04

What are the options available,



01:18:07
the more times. Now we

01:18:32
didn't lesson 11 months back

01:18:34
to waiting. So from that

01:18:36
aspect, you know you as

01:18:38
legal practitioners in the world.

01:18:41
restful recommended by Ciara. I

01:18:48
can try to rephrase your

01:18:50
question. So you asked me

01:18:52
what are the prices for

01:19:00
a drop or go open?

01:19:01
And whether we can like

01:19:02
sit up close. Ward somehow

01:19:06
and adjustments to 22. I



01:19:13

would say 10 Ward has

01:19:15

been rendered based on the

01:19:18

evidence during the hearing and

01:19:21

with whatever valuation day. That

01:19:23

was at. I think once

01:19:25

that's done it's done and

01:19:27

let you know. Unfortunately, sometimes

01:19:29

one party will have to

01:19:31

but will benefit from it

01:19:33

wouldn't fall and and the

01:19:34

other one will work. But

01:19:37

as soon once the award

01:19:38

has rendered that ship has



01:19:41
sailed and it's it's a

01:19:44
little bit of You should

01:19:48
always hope for the best

01:19:50
but be ready for the

01:19:51
worst and that's why it's

01:19:51
it's before we get there.

01:19:53
It's a talk to have

01:19:55
that they look like a

01:19:56
mechanism that will allow you

01:19:58
to to to adjust, you

01:20:02
know, when you are when

01:20:04
it's happening rather than you

01:20:05
know, you know sell for



01:20:08
in full or or Plano.

01:20:12
Do we have one time

01:20:17
for one last question? Do

01:20:18
you have a question? Yes.

01:20:25
crypto investment in like a

01:20:33
couple of chocolate damages related

01:20:40
to Do they have a

01:20:56
separate practice which is very

01:20:58
big and deals with that

01:21:03
would be in a better

01:21:04
position how much more in

01:21:08
the real world and find

01:21:12
so I haven't seen in



01:21:15

a state case for sure

01:21:16

on the strip in a

01:21:18

side that has been contract

01:21:20

Aces that I've been aware

01:21:20

of but not seen how

01:21:22

they've checked a damn just

01:21:24

given the volatility within the

01:21:26

day with the asking my

01:21:28

measuring. Yeah, I mean first

01:21:31

off the whole question of

01:21:33

assets which effectively significantly speculative

01:21:36

assets and we got assets

01:21:37

and remember the difference between



01:21:39

most of the things we're

01:21:40

talking about in these case

01:21:42

most arbitration cases come down

01:21:45

to something to do with

01:21:47

investment in the physical business

01:21:48

and that physical business is

01:21:51

designed one hopes to generate

01:21:53

some future return as opposed

01:21:56

to a I said which

01:21:59

could be a cryptocurrency who

01:22:01

would certainly has potential future

01:22:02

value value fluctuations. I would

01:22:06

guess but has no future



01:22:09
expected chain of returns. Other

01:22:11
than that shakes back to

01:22:12
difference in them in his

01:22:13
future value, right? If I

01:22:16
don't even know right I

01:22:18
buy a painting a beautiful

01:22:20
painting. I love this painting.

01:22:22
I'm going to buy your

01:22:22
painting and I hope you

01:22:24
know 10 years from now

01:22:26
all of you think this

01:22:27
is a super valuable painting

01:22:29
in you're going to buy



01:22:29

it from you for 50

01:22:30

times more but there's no

01:22:32

return to me holding that

01:22:34

asset that painting in the

01:22:36

first place other than I

01:22:37

can hang it on my

01:22:37

wall and say it's nice

01:22:38

right? So it's a difference

01:22:41

between something like that. It's

01:22:43

where you're talking about a

01:22:44

speculative asset rather than an

01:22:47

asset, which is creating returns

01:22:49

over time, which is maybe



01:22:50

what we're dealing with. He

01:22:53

knows how to help people

01:22:54

are going to deal with

01:22:55

these guys ended that's not

01:22:58

nothing. But a financially you

01:23:01

would think they're that there

01:23:02

is a difference a day.

01:23:06

Something which is effectively in

01:23:08

our future value is based

01:23:10

on the idea of appreciation.

01:23:12

Cuz if I buy it

01:23:14

the Bitcoin price is X

01:23:16

and if I sell it



01:23:17

3 years later and it's

01:23:18

Axwell on lots of money

01:23:20

raised and realtor. Totally different

01:23:25

thing. Don't you I think

01:23:28

this pretty much brings us

01:23:31

to the end of our

01:23:32

time and panel. I would

01:23:34

like us to all appreciate

01:23:35

that kind of risk.